

SERVICE MANUAL

BE-3D CHASSIS

MODEL	COMMANDER	DEST.	CHASSIS NO.	MODEL	COMMANDER	DEST.	CHASSIS NO.
KV-29C2A	RM-862	Italian	SCC-K05L-A	KV-29C2E	RM-862	Spanish	SCC-K06L-A
KV-29C2B	RM-862	French	SCC-K01L-A	KV-29C2K	RM-862	OIRT	SCC-K08T-A
KV-29C2D	RM-862	AEP	SCC-K07L-A	KV-29C2R	RM-862	OIRT	SCC-K08U-A



TRINITRON® COLOR TV
SONY®

ITEM	MODEL	Television System	Channel Coverage	Colour System
Italian	B/G/H	VHF: E2-E12 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 ITALIA VHF: A-H, H1, H2 UHF: E21-E69		PAL NTSC3.58/4.43 (video input only)
French	B/G/H, D/K, L, I	L SECAM VHF: F2-F10 UHF: F21-F69 TV CABLE TV (1) VHF: B-Q UHF: S21-S44 PAL B/G/H VHF: E2-E12 UHF: E21-E69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 ITALIA VHF: A-H, H1, H2 PAL I UHF: B21-B69 D/K VHF: R01-R20 UHF: B21-B69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, S42-S46		PAL, SECAM NTSC3.58/4.43 (video input only)
AEP	B/G/H, D/K	B/G/H VHF: E2-E12 UHF: S1-S20 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 ITALIA VHF: A-H, H1, H2 D/K VHF: R01-R20 UHF: B21-B69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, S42-S46		PAL, SECAM NTSC3.58/4.43 (video input only)
Spanish	B/G/H, D/K	PAL B/G/H VHF: E2-E12 UHF: E21-E69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 ITALIA VHF: A-H, H1, H2 D/K VHF: R01-R20 UHF: B21-B69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, S42-S46		PAL, SECAM NTSC3.58/4.43 (video input only)
OIRT	B/G/H, D/K	B/G/H VHF: E2-E12 UHF: E21-E69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 ITALIA VHF: A-H, H1, H2 D/K VHF: R01-R12 UHF: R21-R69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, S42-S46		PAL, SECAM NTSC3.58/4.43 (video input only)

MODEL	29C2A	29C2B	29C2D	29C2E	29C2K 29C2R
Power Consumption	110W	108W	108W	108W	108W

SPECIFICATIONS

Picture Tube Super Trinitron
Approx. 72 cm (29 inches)
(Approx. 68 cm picture measured diagonally)
110° -deflection

[FRONT]

- 3, Video input - phono jack
- 3, Audio inputs - phono jacks
- 3, S video input - 4 pin DIN
- ↻ Stereo minijack - headphone jack

Rear/Front Terminals

[REAR]

- 1 21-pin Euro connector (CENELEC standard)
 - Inputs for audio / video signals
 - Inputs for RGB
 - Outputs for TV audio and video signals
 - 2/ → 2, 21-pin Euro connector (CENELEC standard)
 - Inputs for audio / video signals
 - Inputs for S video
 - Outputs for TV audio and video signals (selectable)
- audio outputs - phono jacks
Woofer terminals : 2-pin DIN

Sound output

- Left/Right 2x10W (RMS)
2x20W (music power)
- Woofer 1x20W (RMS)
1x40W (music power)
- Dimensions 794x567x530 mm approx.
- Weight Approx. 46.0 kg (with woofer)

Supplied accessories

- RM-862 Remote Commander (1)
- Batteries R6 (2)
- woofer (1)

Other features

- Fastext
- NICAM (KV-29C2B, 29C2E only)

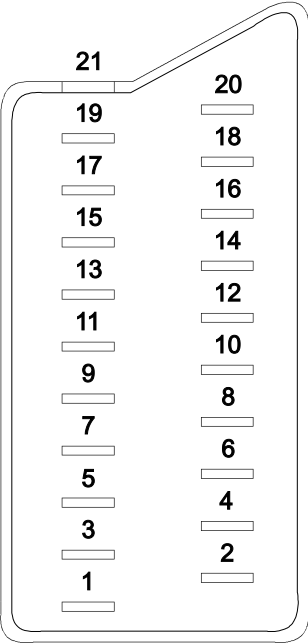
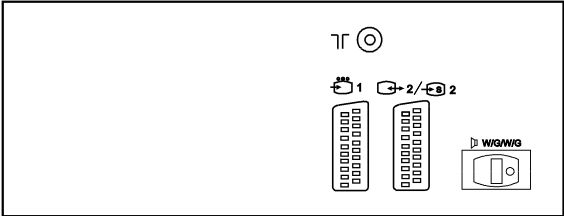
[RM-862]

Remote control system Infrared control
 Power requirements 3V dc (2 batteries) R6 (size AA)
 Dimensions Approx. 210x56x24 mm (w/h/d)
 Weight Approx. 110g (Not including battery)

Design and specifications are subject to change without notice.

Item	Model name				
	KV-29C2A	KV-29C2B	KV-29C2D	KV-29C2E	KV-29C2K KV-29C2R
PIP	OFF	OFF	OFF	OFF	OFF
MPIP	OFF	OFF	OFF	OFF	OFF
RGB Priority	ON	ON	OFF	OFF	OFF
Rotation Coil	OFF	OFF	OFF	OFF	OFF
VM (Velocity Modulation)	ON	ON	ON	ON	ON
Scart 1	ON	ON	ON	ON	ON
Scart 2	ON	ON	ON	ON	ON
Front in (3)	ON	ON	ON	ON	ON
Scart 4	OFF	OFF	OFF	OFF	OFF
AKB in 16:9 mode	ON	ON	ON	ON	ON
TXT	ON	ON	ON	ON	ON
FLOF	ON	ON	ON	ON	ON
TOP	ON	ON	ON	ON	ON
Norm B/G/H	ON	ON	ON	ON	ON
Norm I	OFF	ON	OFF	OFF	OFF
Norm D/K	OFF	ON	ON	ON	ON
Norm L	OFF	ON	OFF	OFF	OFF
Language Preset	Italian	French	German	Spanish	OIRT

21 pin connector (→ 1, ← 2 / → 2)



Pin No.	1	2	4	Signal	Signal Level
1	○	○	○	Audio output B (Right)	Standard level : 0.5V rms Output impedance : Less than 1k ohms*
2	○	○	○	Audio input B (Right)	Standard level : 0.5V rms Output impedance : More than 10k ohms*
3	○	○	○	Audio output A (Left)	Standard level : 0.5V rms Output impedance : Less than 1k ohm*
4	○	○	○	Ground (Audio)	
5	○	○	○	Ground (Blue)	
6	○	○	○	Audio input A (Left)	Standard level : 0.5V rms Output impedance : Less than 10k ohm*
7	○	●	●	Blue input	0.7 ± 3dB, 75 ohms, positive
8	○	○	○	Function select (AV control)	High state (9.5 - 12V) : Part mode Low state (0 - 2V) : TV mode Input impedance : More than 10k ohms Input capacitance : Less than 2nF
9	○	○	○	Ground (Green)	
10	○	○	○	Open	
11	○	●	●	Green	
12	○	○	○	Open	
13	○	○	○	Ground (Red)	
14	○	○	○	Ground (Blanking)	
15	○	—	—	Red input	0.7 ± 3dB, 75 ohms, positive
	—	○	○	(S signal) chroma input	0.7 ± 3dB, 75 ohms, positive
16	○	●	●	Blanking input (Ys signal)	High state (1 - 3V) Low state (0 - 0.4V) Input impedance : 75 ohms
17	○	○	○	Ground (Video output)	
18	○	○	○	Ground (Video input)	
19	○	○	○	Video output	1V ± 3dB, 75ohms, positive sync : 0.3V (-3 + 10dB)
20	○	—	—	Video input	1V ± 3dB, 75ohms, positive sync : 0.3V (-3 + 10dB)
	—	○	○	Video input Y (S signal)	1V ± 3dB, 75ohms, positive sync : 0.3V (-3 + 10dB)
21	○	○	○	Common ground (plug, shield)	

○ Connected ● Not Connected (Open) * at 20Hz - 20kHz

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CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

WARNING !!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.
THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING!!
COMPONENTS IDENTIFIED BY SHADING AND MARK  ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND, IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.


ATTENTION

APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

ATTENTION !!

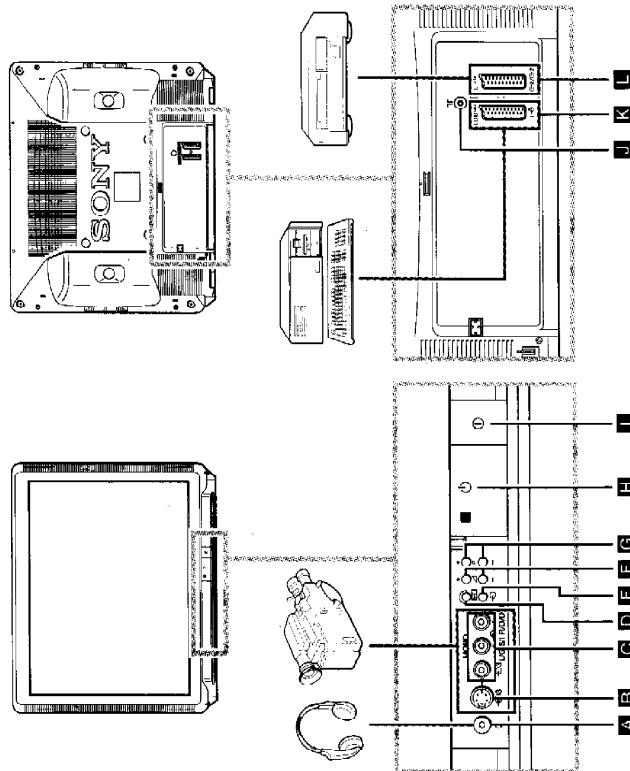
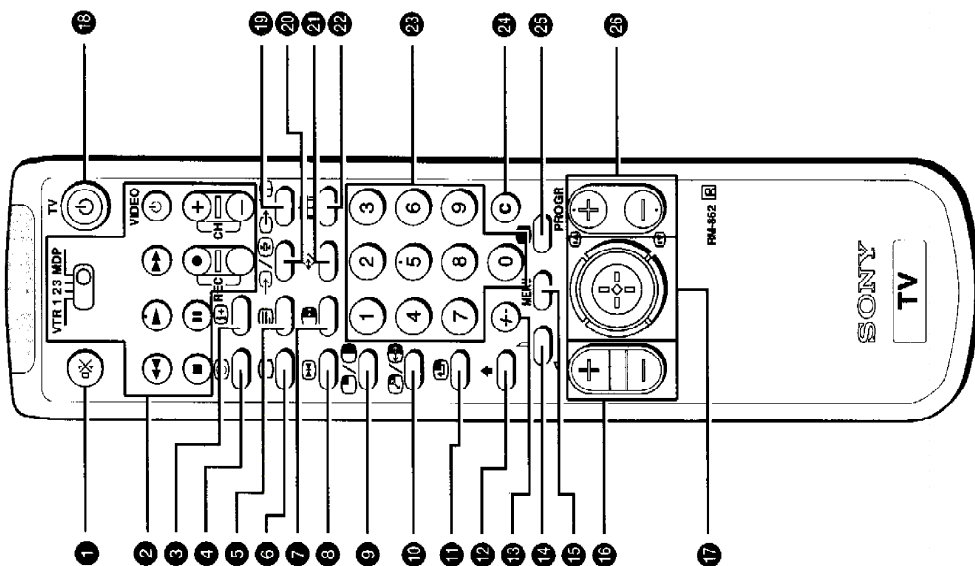
AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÂSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE. LE CHÂSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ À L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET PAR UNE MARQUE  SUR LES VUES EXPLODÉES ET LES LISTES DE PIÈCES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÈCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY.

SECTION 1 GENERAL

The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.



Overview

This section briefly describes the controls and the buttons on the TV set and on the Remote Commander. Please open the flaps at the front and at the back of the Instruction manual for illustrations of the Remote Commander and the TV set. Letters in boxes refer to the buttons on the TV set; numbers in circles to the buttons on the Remote Commander. For more information, refer to the page numbers given next to each description.

TV buttons and Terminals

Reference and Symbol	Name	Refer to Page
Front of the set		
A	Headphones jack	59
B	S video input jack	59
C	Audio/video input jacks	59
D	Automatic Preset button	41
E	Input mode button	60
F	Volume control	43
G	Programme button	42
H	Standby mode indicator	42
I	Main power switch	42
Rear of the set		
J	Aerial socket	40
K	21 pin Euro connector	59
L	21 pin Euro connector	59
M	Woofer terminal	40

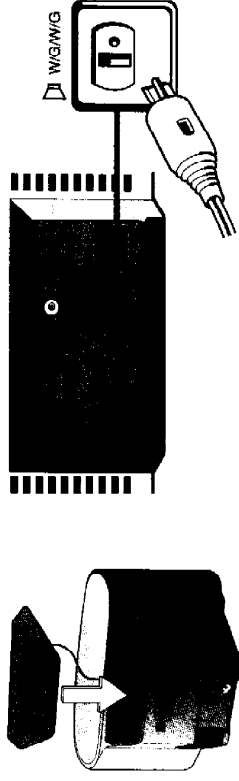
Remote Commander Operation

Reference and Symbol	Name	Refer to Page
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VTR 123 MDP		
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VIDEO CH +/-		
3	On-screen display button	42
4	Time display button	42
5	Teletext button	57
6	TV power on/TV mode button	42, 43
7	No function on this set	-
8	Double digit entering button	42
9	Sound mode button	49
10	Menu on/off button	44
11	Volume control button	42
12	Joystick for menu selection	44
13	Press to confirm selection (OK function)	44
14	TV standby button	42
15	No function on this set	-
16	Teletext: reveal button	57
17	Input mode button	60
18	Teletext: Freezing the subpage	57
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20	Screen format button	42
21	Number buttons	42
22	Direct channel button	43
23	Picture mode button	49
24	Programme buttons	42
25	Teletext: Page up/page down buttons	57

Step 1

Connecting the Woofer

Place the woofer on top of the TV set. Connect the lead of the woofer to the terminal **W/G/W/G** at the rear of the set.



Step 2

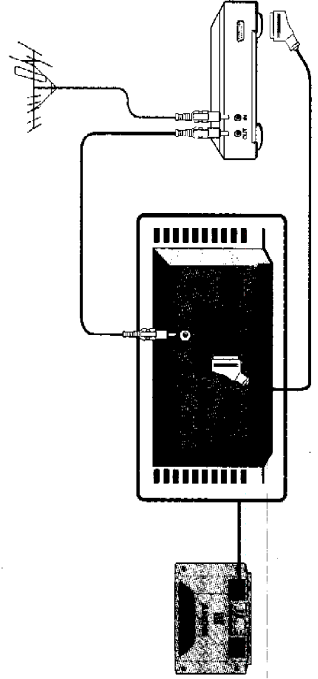
Connecting the Aerial (If you connect a VCR, skip to step 3)

Insert the aerial plug tightly into the aerial socket **7**. Use a good-quality aerial cable (not supplied), corresponding to the relevant regulations.

Step 3

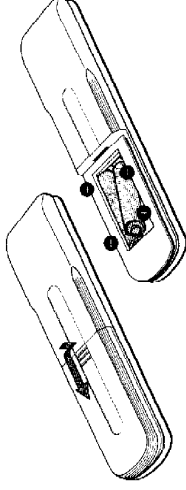
Connecting a VCR

We recommend that you tune in the VCR signal to programme number »0«. For details, see »Presetting Channels Manually« on page 46. See »Connecting Optional Equipment« on page 59 for more information.



Step 4

Inserting the Batteries Into the Remote Commander



Respect your environment! Dispose of used batteries in an environmentally friendly way.

Step 5

Presetting Channels Automatically

With this function, the TV can automatically search and store up to 100 different channel numbers.

If you prefer manual presetting, refer to »Presetting Channels Manually« on page 46.

1

Plug into mains.
Press the power switch **1** on the TV set.

2

Press and hold the button **2** on the TV set until the automatic menu is displayed and the search starts.

After all available channels are stored, the normal TV picture is shown.

TV Operation

This section explains functions used whilst watching TV. Most operations are carried out using the remote commander (numbers in circles). All basic functions are also available on the TV set (letters in boxes). Open the flaps at the front and at the back of the Instruction Manual to see the illustrations of the Remote Commander and the TV set.


To	Press
Switch on	Ⓚ on TV
Switch off temporarily	Ⓚ TV is now in standby mode and indicator Ⓚ on TV lights up.
Switch on from standby mode	Ⓚ, PROG + / - Ⓚ or any number button Ⓚ
Switch off completely	Ⓚ on TV To save energy, switch off your TV completely when TV is not in use.
Select programmes	PROG + / - Ⓚ or number buttons Ⓚ. For double digit number, press - / - Ⓚ then the number, e.g. for 23, press - / - Ⓚ then 2 and 3.
Display on screen indications	Ⓚ. Press again to make the indications disappear.
Adjust the volume	△ + or - ▽
Mute the sound	Ⓚ. Press again to restore the sound.
Display the time (only available when teletext	Ⓚ. Press again to make the display disappear.

TV Operation (continued)

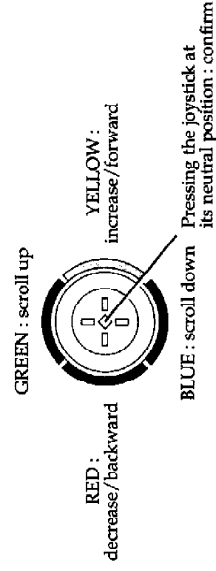
To	Press
View programmes in 16:9 mode	Ⓚ. Press again to return to 4:3 mode.
Tune in a channel temporarily	C once for terrestrial channels (or twice for cable channels). The indication »C« (»S« for cable channels) appears. Enter the double digit number, e.g. for 4, press 0 then 4.
View video input picture (see page 60 for detailed information)	Ⓚ repeatedly until the desired video input appears. Press Ⓚ to restore the TV picture.
View teletext (see page 57 for detailed information)	
Switch on	Ⓚ
Select a page	three number buttons Ⓚ or Ⓚ (for next page) or Ⓚ (for previous page).
Use fastext	Push joystick Ⓚ to select a colour.
Switch off	Ⓚ

Adjusting and Setting the TV Using the Menu

You can adjust and set various functions on the TV using the following remote commander buttons.





- 1 Press MENU  to switch menu on/off.


- 2 Use the joystick  as follows:

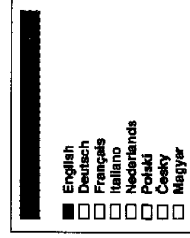



Choosing the Menu Language

This function enables you to change the language of the menu screens.

- 1 Press power switch  on the TV. If the standby indicator  on the TV is lit, press  or a number button  on the Remote Commander.

- 2 Press the MENU button  on the remote commander.





- 3 Push joystick  to blue or green to select the language you want then push to yellow.

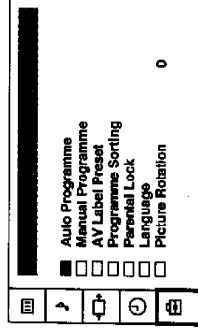
- 4 Press the MENU button  to restore the normal TV picture.

Presetting Channels Automatically

You may have already preset the channels automatically by using the method shown on page 41. You can also preset channels automatically by using the remote commander as follows:

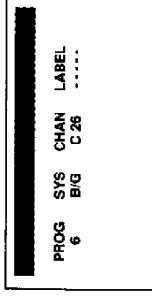
- 1 Press the MENU button .

- 2 Push joystick  to blue or green to select the symbol  on the menu screen then push to yellow.



- 3 Push to blue or green to select »Auto Programme«.

- 4 Push to yellow and hold until the automatic menu is displayed and the search starts. After all available channels have been preset, the normal TV picture is shown.

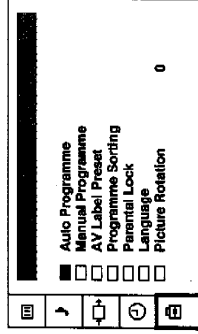


Presetting Channels Manually

This function enables you to preset channels one by one to different programme numbers. This is also convenient for allocating programme numbers to various video input sources.

1 Press the MENU button **Ⓜ**.

2 Push joystick **⬆** to blue or green to select the symbol **Ⓜ** on the menu screen then push to yellow.



3 Push to blue or green to select »Manual Programme« then push to yellow.

PROG	SYS	CHAN	LABEL	AFT
<input type="checkbox"/> 0	B/G	C29	----	ON
<input type="checkbox"/> 1	B/G	C31	----	ON
<input type="checkbox"/> 2	B/G	C32	----	ON
<input type="checkbox"/> 3	B/G	C36	----	ON
<input type="checkbox"/> 4	B/G	C37	----	ON
<input type="checkbox"/> 5	B/G	C40	----	ON
<input type="checkbox"/> 6	B/G	C41	----	ON
<input type="checkbox"/> 7	B/G	C44	----	ON
<input type="checkbox"/> 8	B/G	C49	----	ON
<input type="checkbox"/> 9	B/G	C52	----	ON

4 Push to blue or green to select to which programme number you want to preset a channel then push to yellow.

5 Push to blue or green to select the TV broadcast system (B/G for western European countries or D/K for eastern European countries) or a video input source (AV1, AV2 ...) then push to yellow.

6 Push to blue or green to select »C« (for terrestrial channels) or »S« (for cable channels) then push to yellow.

7 Select the first number digit of »CHAN« (channel) then the second number digit of »CHAN« with the number buttons **Ⓜ** on the remote commander
or
Push joystick **⬆** to blue or green to search for the next available channel.

8 If you want to store the channel, go to step 9. If not, select a new channel using the number buttons **Ⓜ** or push to blue or green to resume the search.







9 Press the joystick **⬆**.

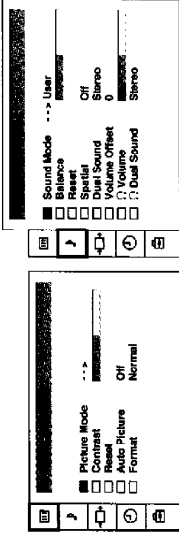
10 Repeat steps 4 to 9 to preset other channels.

11 Press the MENU button **Ⓜ** to restore the normal TV picture.



Adjusting the Picture and Sound

Although the picture and sound are adjusted at the factory, you can adjust them to suit your own taste.

- 1 Press the MENU button .
- 2 Push joystick  to blue or green to select  for picture control or  for sound control then push to yellow.
- 3 Push to blue or green to select the desired item then push to yellow.
- 4 Push to red or yellow to alter the item then press the joystick . For the effect of each control, see the following tables.
- 5 Repeat steps 3 and 4 to adjust the other items.
- 6 Press the MENU button  to restore the normal TV picture.





PICTURE CONTROL Effect

Picture Mode	<ul style="list-style-type: none">• User → Game → Movie → Sports → LiveIn »User« mode, you can preset Brightness, Colour, Sharpness and Hue (NTSC signals only) as follows:1 Push joystick  to blue or green to select the desired item then push to yellow.2 Push to red or yellow to adjust then press the joystick .3 Push to red to return to the PICTURE CONTROL menu.• Darker — | — Brighter• Resets picture to the factory preset levels.• All the picture levels automatically change according to the surrounding lighting level (Auto Picture Control).• Wide screen effect (16:9)
Contrast	
Reset	
Auto Picture	
Format	






Adjusting the Picture and Sound (continued)

SOUND CONTROL Effect

Sound Mode	<ul style="list-style-type: none">• User → Rock → Jazz → PopIn »User« mode, you can preset Treble and Bass as follows:1 Push joystick  to blue or green to select the item then push to yellow.2 Push to red or yellow to adjust then press the joystick .3 Push to red to return to the »SOUND CONTROL« menu.• Left — | — Right• Resets sound to the factory preset levels.• Acoustic sound effect• A: Left channel → B: Right channel → Stereo → Mono• Presets the volume level for individual programmes -12 — 0 — +12• Adjusts the headphone volume• Selects the headphone channelsA: Left channel → B: Right channel → Stereo → Mono
Balance	
Reset	
Spatial	
Dual Sound	
Volume Offset	
Volume	
Dual Sound	

Changing Modes Quickly

You can quickly change the Sound Mode or the Picture Mode without entering the »SOUND CONTROL« or the »PICTURE CONTROL« menu.

- 1 Press  for the picture or  for the sound.
- 2 Push joystick  to blue or green to select the desired mode.
- 3 Press  or  again to restore the normal TV screen.

Manual Fine-Tuning

Normally, the automatic fine-tuning (AFT) function is operating.

If the picture is distorted however, you can manually fine-tune a channel to obtain a better picture reception.

- 1 Press the MENU button **Ⓜ**.
- 2 Push joystick **⬆** to blue or green to select the symbol **Ⓜ** on the menu screen then push to yellow.
- 3 Push to blue or green to select »Manual Programme« then push to yellow.

PROG	SYS	CHAN	LABEL	AFT
0	B/G	C 29	.....	ON
1	B/G	C 31	.....	ON
2	B/G	C 32	.....	ON
3	B/G	C 36	.....	ON
4	B/G	C 37	.....	ON
5	B/G	C 40	.....	ON
6	B/G	C 41	.....	ON
7	B/G	C 44	.....	ON
8	B/G	C 49	.....	ON
9	B/G	C 52	.....	ON

- 4 Push to blue or green to select the programme number which corresponds to the channel you want to manually fine-tune.
- 5 Push to yellow repeatedly until the AFT position changes colour.
- 6 Push to blue or green to fine-tune the channel frequency (-15 to +15).
- 7 Press the joystick **⬆**.
- 8 Repeat steps 4 to 7 to fine-tune other channels.
- 9 Press the MENU button **Ⓜ** to restore the normal TV picture.

Sorting Programme Positions

This function enables you to exchange the programme positions.

- 1 Press the MENU button **Ⓜ**.
- 2 Push joystick **⬆** to blue or green to select the symbol **Ⓜ** on the menu screen then push to yellow.
- 3 Push to blue or green to select »Programme Sorting« then push to yellow.

PROG	SYS	CHAN	LABEL
0	B/G	C 29	.....
1	B/G	C 31	.....
2	B/G	C 32	.....
3	B/G	C 36	.....
4	B/G	C 37	.....
5	B/G	C 40	.....
6	B/G	C 41	.....
7	B/G	C 44	.....
8	B/G	C 49	.....
9	B/G	C 52	.....

- 4 Push to blue or green to select the programme position you want to exchange then push to yellow.

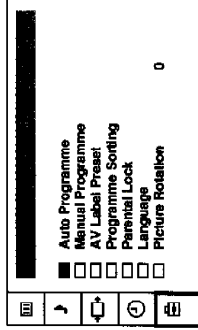
PROG	SYS	CHAN	LABEL
0	B/G	C 29	.....
1	B/G	C 31	.....
2	B/G	C 32	.....
3	B/G	C 36	.....
4	B/G	C 37	.....
5	B/G	C 40	.....
6	B/G	C 41	.....
7	B/G	C 44	.....
8	B/G	C 49	.....
9	B/G	C 52	.....

- 5 Push to blue or green to select the programme position of the channel you want exchanged then push to yellow.
- 6 Repeat steps 4 to 5 if you wish to exchange other programme positions.
- 7 Press the MENU button **Ⓜ** to restore the normal TV picture.

Using Parental Lock

This function enables you to prevent undesirable broadcasts from appearing on the screen. We suggest you use this function to prevent children from watching programmes which you consider unsuitable.

- 1 Press the MENU button **Ⓜ**.
- 2 Push joystick **⬆** to blue or green to select the symbol **Ⓜ** on the menu screen then push to yellow.
- 3 Push to blue or green to select »Parental Lock« then push to yellow.



PROG	SYS	CHAN	LABEL
0	B/G	C28	BBC-W
1	B/G	C29	VHS-2
2	B/G	C35	CNN--
3	B/G	C38	----
4	B/G	C40	WV-CH
5	B/G	C42	VHS-1
6	B/G	C55	----
7	B/G	C56	0MM
8	B/G	C57	----
9	B/G	C58	----

- 4 Push to blue or green to select the channel you want to block then push to yellow.
The symbol **Ⓜ** appears before the programme number to indicate that this channel is now blocked.

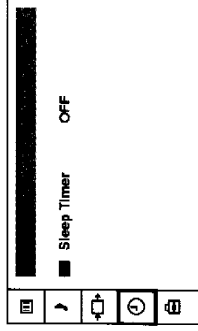
- 5 Repeat step 4 if you wish to block other channels.
- 6 Press the MENU button **Ⓜ** to restore the normal TV picture.

Note: To unblock, push to yellow after selecting the channel to unblock in the »Parental Lock« menu.

Using the Sleep Timer

This function enables you to select a time period after which the TV automatically switches into standby mode.

- 1 Press the MENU button **Ⓜ**.
- 2 Push joystick **⬆** to blue or green to select the symbol **Ⓜ** on the menu screen then push to yellow.
- 3 Push to yellow.
- 4 Push to red or yellow to set time delay and press the joystick **⬆**.






OFF 0:30 1:00 1:30 3:30 4:00

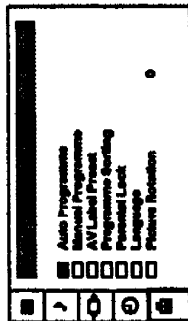
One minute before the TV switches into standby mode, a message is displayed on the screen.

- 5 Press the MENU button **Ⓜ** to restore the normal TV picture.

Adjusting the Picture Rotation

If, due to the earth magnetism, the picture slants, you can use the function »Picture Rotation« to readjust the picture.






- 1 Press the MENU button .
- 2 Push joystick  to blue or green to select the symbol  on the menu screen then push to yellow.

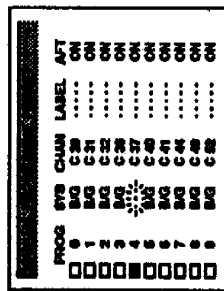


- 3** Push to blue or green to select »Picture Rotation« then push to yellow.
- 4** Push to red or yellow to adjust the picture rotation then press the joystick **17**. The adjusting range is -5 to +5.
- 5** Press the MENU button **15** to restore the normal TV picture.

Skipping Programme Positions

This function enables you to skip unused programme positions when selecting them with the PROG+/- buttons. However, you can still watch the channel of the skipped programme position by using the number buttons.

- 1 Press the MENU button .
- 2 Push joystick  to blue or green to select the symbol  on the menu screen then push to yellow.
- 3 Push to blue or green to select »Manual Programme« then push to yellow.
 
- 4 Push to blue or green to select the programme position you want to skip then push to yellow.
- 5 Push to blue or green until »- - <« appears in the »SYS« position.
 

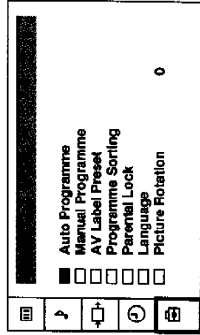


- 6** Press the joystick **10**.
- 7** Repeat steps **4** to **6** to skip other programme positions.
- 8** Press the MENU button **5** to restore the normal TV picture.

Captioning a Station Name

Names for channels are usually automatically taken from teletext if available. You can however name a channel or an input video source using up to five characters (letters or numbers).

- 1 Press the MENU button **16**.
- 2 Push joystick **17** to blue or green to select the symbol **18** on the menu screen then push to yellow.
- 3 Push to blue or green to select »Manual Programme« then push to yellow.



- 4 Push to blue or green to select the channel you wish to caption then push to yellow repeatedly until the first element of the »LABEL« position is highlighted.
- 5 Push to blue or green to select a letter or number (select »-« for a blank) and push to yellow.
Select the other four characters in the same way.
- 6 After selecting all the characters, press the joystick **17**.
- 7 Repeat steps 4 to 6 to caption names for other channels.
- 8 Press the MENU button **16** to restore the normal TV screen.

PROG	SYS	CHAN	LABEL	AFT
<input type="checkbox"/> 0	B/G	C 29	-----	ON
<input type="checkbox"/> 1	B/G	C 31	-----	ON
<input type="checkbox"/> 2	B/G	C 32	-----	ON
<input type="checkbox"/> 3	B/G	C 36	-----	ON
<input checked="" type="checkbox"/> 4	B/G	C 37	-----	ON
<input type="checkbox"/> 5	B/G	C 40	-----	ON
<input type="checkbox"/> 6	B/G	C 41	-----	ON
<input type="checkbox"/> 7	B/G	C 44	-----	ON
<input type="checkbox"/> 8	B/G	C 49	-----	ON
<input type="checkbox"/> 9	B/G	C 52	-----	ON

Teletext

Teletext

Most TV channels broadcast information via teletext. The index page of the broadcaster (usually page 100) gives you information on how to use the service. Make sure you use a TV channel with a strong signal, otherwise teletext errors may occur.

Switching Teletext on and off

- 1 Select the channel which carries the teletext service you wish to view.
- 2 Press **19** to display teletext.
If no teletext signal is broadcast, the indication P100 is displayed on a black screen.
- 3 Input three digits for the page number using the number buttons **20**.
The page counter searches for the page and after some seconds the page is displayed.
- 4 Press **16** to return to the normal TV picture.

Using Other Teletext Functions

To	Press
Access the next or preceding teletext page	19 20 for the next page or 19 20 for the preceding page
Mix the mode	19 20 when in teletext mode. Now the teletext page is superimposed on the TV programme. Press again to return to the normal teletext display.
Freeze a teletext subpage	19 20 . Press once again to cancel.
Reveal hidden information (e.g.: answers to a quiz)	19 20 . Press once again to cancel.

Favourite page system

You can store up to four of your favourite teletext pages per Teletext service. In this way you have quick access to the pages you frequently use.

Storing pages

1 Use the number buttons **23** to select the page you would like to store.

2 Press **↔** **24** twice.
The colour prompts at the bottom of the screen flash.

3 Push the joystick **17** to the desired colour to store the selected page.
The page is now stored on this colour.

Repeat steps 1 to 3 for the other 3 pages.

Displaying the Favourite Pages

1 Press **↔** **24**.

2 Push the joystick **17** to the colour on which the desired page is stored.

Make sure you press **↔** **24** , otherwise the normal Fastext facility operates!

Using Fastext





(only available, if the TV station broadcasts Fastext signals)

With Fastext you can access pages with one key stroke . When Fastext is broadcast, a colour-coded menu appears at the bottom of the screen. The colours of this menu correspond to the red, green, yellow and blue marks on the Remote Commander.

Push the joystick **17** to the colour mark which corresponds to the colour-coded menu.
The page is displayed after some seconds.

Connecting Optional Equipment


There is a wide range of optional equipment you can connect to your TV.
Refer to the illustrations on the back flap page of this manual.

Symbol	Acceptable input signals	Available output signals
 1 K	Normal audio/video and RGB	Audio/video from TV tuner
 2 / 2 L	Normal audio/video and S video	Audio/video from selected source
 3, 3 B  3 C	Normal audio/video and S video	No output


About S video input

Video signals may be separated into Y (luminance) and C (chrominance) signals. Separating the two signals prevents interference and thus improves the picture quality.

Notes on connections:

- If the picture or sound is distorted, move the VCR away from the TV.
- When connecting a monaural VCR, connect only the white jack to both the TV and VCR.
- Select »TV« for output in the »VIDEO CONNECTION« menu if you connect a decoder to  **2 / 2 L** (see page 60).

Connecting Headphones

Plug in the headphones to the  socket **A** on the front of the TV.

Selecting Input and Output Signals

This section explains how to select the output signal from $\text{2/} \rightarrow \text{2}$ and how to select and view the input. You can use direct access buttons 2 2 2 to select the input or the menu system to select input and output.

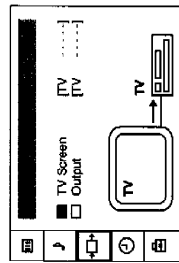
Selecting Input Signals With Direct Access Buttons

Press 2 2 2 repeatedly.
Press 2 2 to restore the normal TV picture.

Symbol on the screen	Input Signal
2 1	Audio/video through Euro AV connector 2
2 2	RGB through Euro AV connector 2
2 2	Audio/video through Euro AV connector 2
2 3	S video through Euro AV connector 2
2 3	Audio/video through the phono jacks 2
2 3	S video through the 4 pin DIN 2

Selecting With the Video Connection Menu

- 1 Press the MENU button 2 .
- 2 Push joystick 2 to blue or green to select 2 for »Video Connection« then push to yellow.



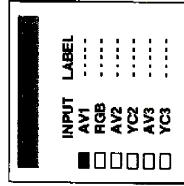
- 3 Push to blue or green to select »TV Screen« (input source for the TV Screen) or »Output« (output source for $\text{2/} \rightarrow \text{2}$) then push to yellow.
- 4 Push to red or yellow repeatedly to select the desired input or output source then press the joystick 2 .
- 5 Press the MENU button 2 to restore the normal TV picture.

Note: If you select »AUTO« for output, the output source automatically becomes the same as the desired input source.

Using AV Label Preset

This function enables you to label the input sources using up to five characters (letters or numbers).

- 1 Press the MENU button 2 .
- 2 Push joystick 2 to blue or green to select the symbol 2 on the screen then push to yellow.
- 3 Push to blue or green to select »AV Label Preset« then push to yellow.



- 4 Push to blue or green to select the desired input source then push to yellow.
- 5 Push to blue or green to select a letter or number then push to yellow (select »« for a blank).
Select the other four characters in the same way.
- 6 After selecting all the characters, press the joystick 2 .
- 7 Repeat steps 4 to 6 to label other input sources.
- 8 Press the MENU button 2 to restore the normal TV screen.

Troubleshooting

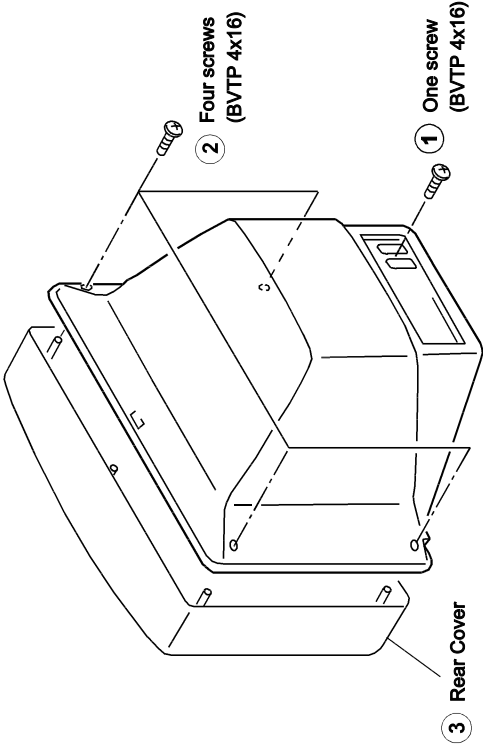
Here are some simple solutions to the problems which may affect the picture and sound.

Problem	Solution
No picture (screen is dark), no sound	<ul style="list-style-type: none"> • Plug the TV in. • Press ⏻ on the TV. (If ⏻ indicator H is on, press ⏻ or a programme number ⏻ on the Remote Commander.) • Check the aerial connection. • Check if the selected video source is on. • Turn the TV off for 3 or 4 seconds then turn it on again using ⏻. • Press MENU ⏻ to enter the »PICTURE CONTROL« menu and adjust »Contrast«, »Brightness« and »Colour«.
Poor or no picture (screen is dark), but good sound	<ul style="list-style-type: none"> • Press ⏻ ⏻ repeatedly to select ⏻.
Poor picture quality when watching an RGB video source.	<ul style="list-style-type: none"> • Press ⏻ + ⏻. • If ⏻ is displayed on the screen, press ⏻.
Good picture but no sound	<ul style="list-style-type: none"> • Press MENU ⏻ to enter the »PICTURE CONTROL« menu, select »Reset« then press the joystick ⏻.
No colour for colour programmes	<ul style="list-style-type: none"> • Replace the batteries
Remote Commander does not function.	

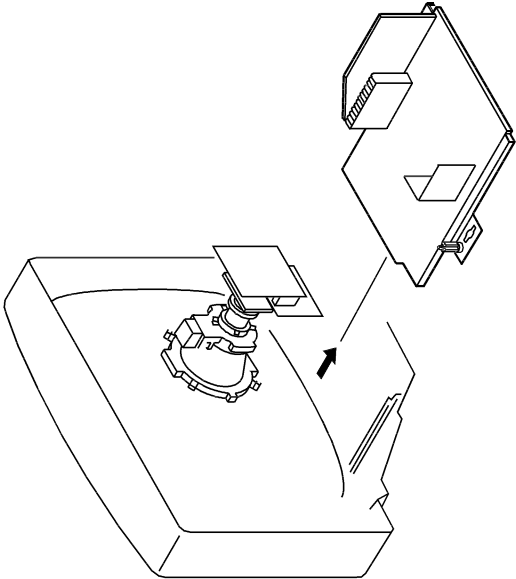
If you continue to have problems, have your TV serviced by qualified personnel. Never open the casing yourself.

SECTION 2
DISASSEMBLY

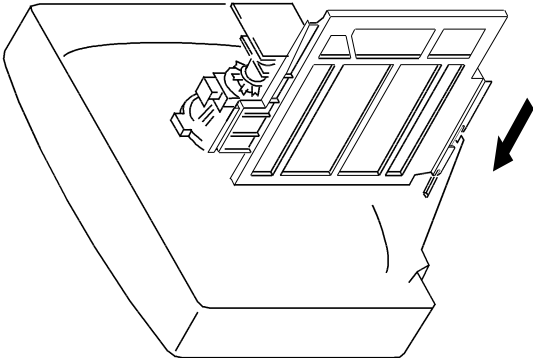
2-1. REAR COVER REMOVAL



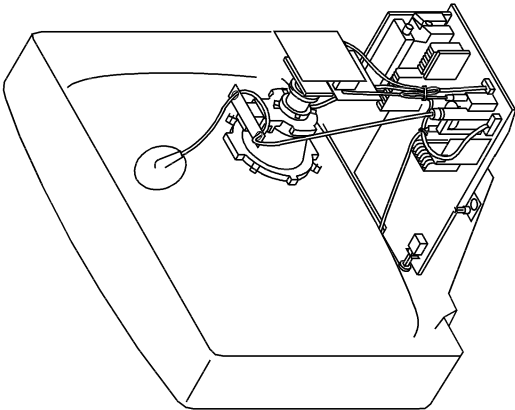
2-2. CHASSIS ASSY REMOVAL



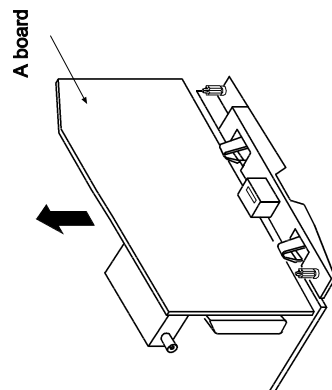
2-3. SERVICE POSITION



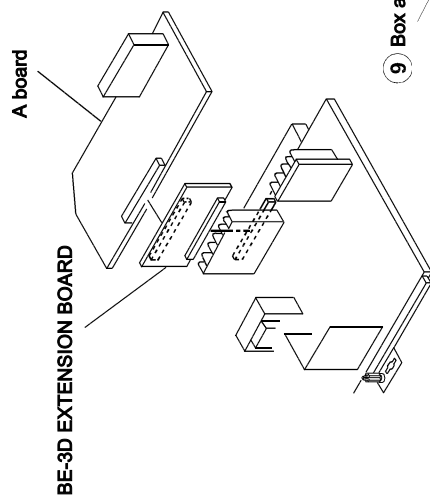
2-4. WIRE DRESSING



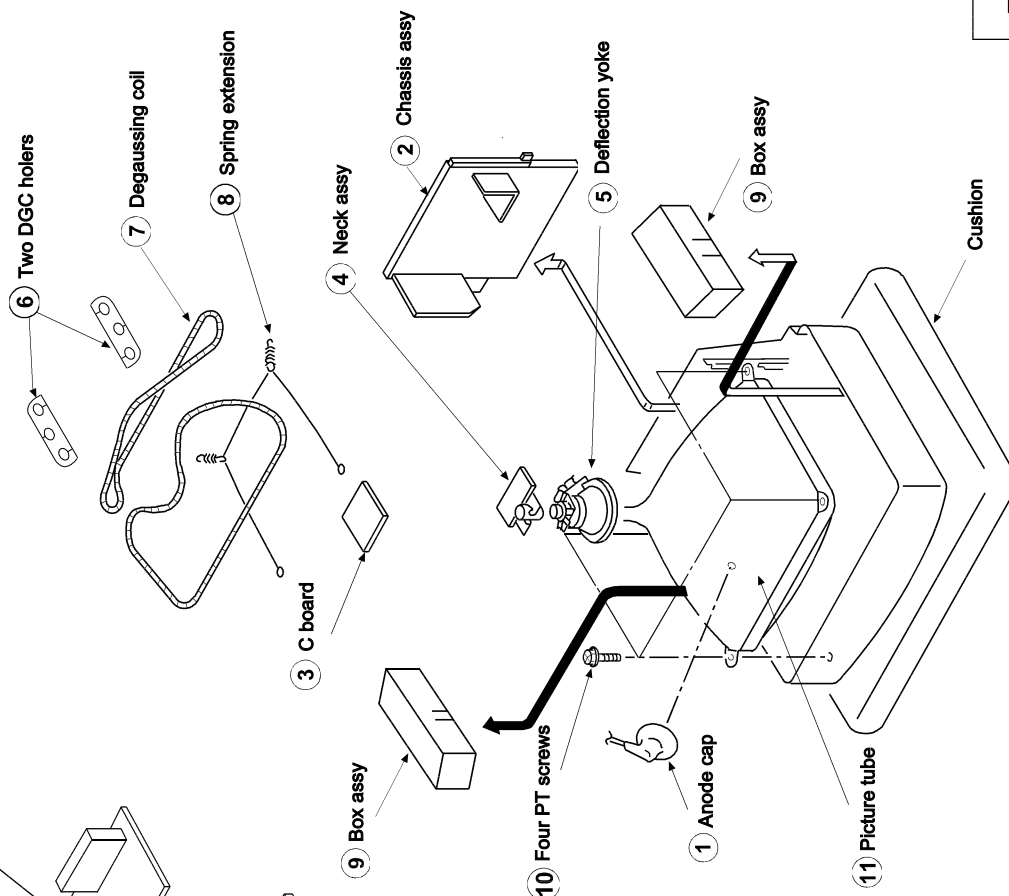
2-5. A BOARD REMOVAL



2-6. A EXTENSION BOARD



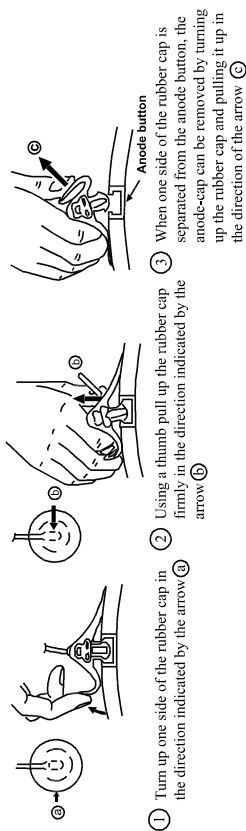
2-7. PICTURE TUBE REMOVAL



• REMOVAL OF ANODE-CAP

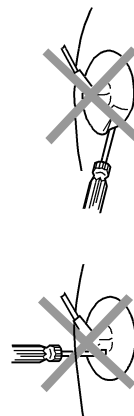
Note: Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT, after removing the anode.

* REMOVING PROCEDURES.



• HOW TO HANDLE AN ANODE-CAP

- ① Don't damage the surface of anode-cap with sharp shaped material !
 - ② Don't press the rubber hardly not to hurt inside of anode-caps !
 - ③ A metal fitting called as shatter-hook terminal is built into the rubber. Don't turn the foot of rubber over hardly !
- The shatter-hook terminal will stick out or damage the rubber.



REMOVAL AND REPLACEMENT OF THE MAIN-BRACKET BOTTOM PLATES.

(1) REMOVING THE PLATES

In the event of servicing being required to the solder side of the D Board printed circuit, the bottom plates fitted to the main chassis bracket require to be removed. This is performed by cutting the gates with a sharp wire cutter at the locations shown and indicated by arrows.

Note : There are 5 plates fitted to the main bracket and secured by 4 or 6 gates. Only remove the necessary plate to gain access to the circuit board.

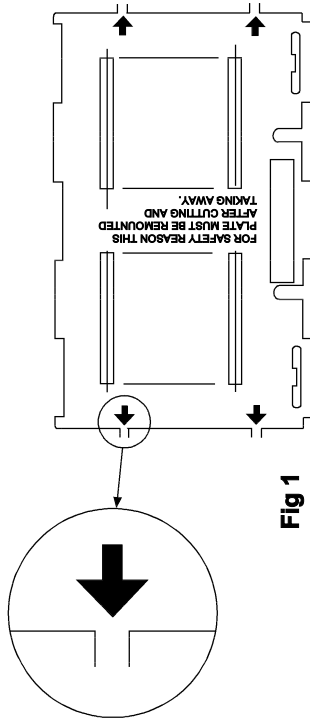


Fig 1

! For safety reasons, on no account should the plates be removed and not refitted after servicing.

(2) REFITTING THE PLATES

Because the plates differ in size it is important that the correct plates are refitted in their original location.

The plates are identified by markings A-B-C-D-E on their top side.

1. Identify the plate by locating its marking.
2. Turn the plate over noting where the marking is located.
3. Locate the corresponding marking indicated on the main chassis bracket. See Fig 2.
4. Refit the plate as indicated in Fig 3 with the markings located next to each other.

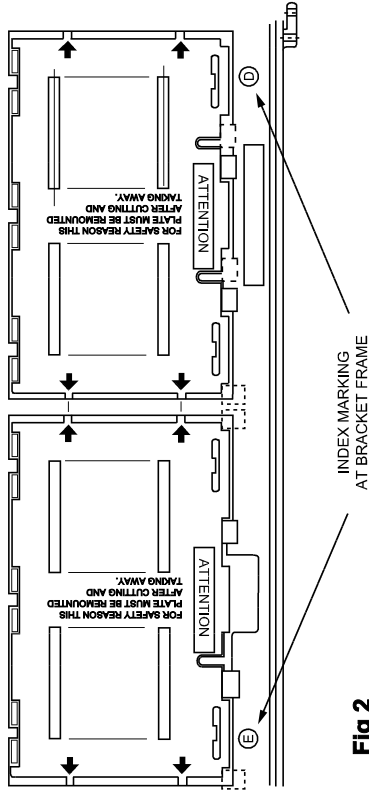


Fig 2

In the event of the plates requiring to be removed at a later stage, this can be achieved by inserting a screwdriver in the snap-recess indicated as in Fig 4 and lifting out.

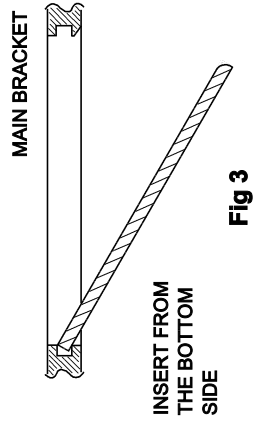


Fig 3

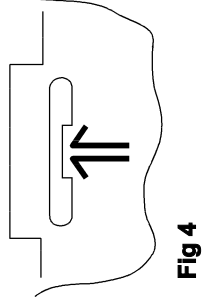


Fig 4

SECTION 3

SET - UP ADJUSTMENTS

- When complete readjustment is necessary or a new picture tube is installed, carry out the following adjustments.
- Unless there are specific instructions to the contrary, carry out these adjustments with the rated power supply.
- Unless there are specific instructions to the contrary, set the controls and switches to these settings :

1 Contrast 80% (or remote control normal)
 ☆ Brightness 50%

- Carry out the following adjustments in this order :

1. Beam landing
2. Convergence
3. Focus
4. White balance

Note: Testing equipment required.

1. Color bar/pattern generator
2. Degausser
3. DC power supply
4. Digital multimeter
5. Oscilloscope

Preparation:

- In order to reduce the influence of geomagnetism on the set's picture tube, face it east or west.
- Switch on the set's power and degauss with the degausser.

3-1. BEAM LANDING

- Input the white signal with the pattern generator.
 CONTRAST } normal
 BRIGHTNESS }
- Position neck assy as shown in Fig.3-2.
- Set the pattern generator raster signal to red.
- Move the deflection yoke forward and adjust with the purity control so that the red is at the centre and the blue and the green take up equally sized areas on each side. (See Fig. 3-1 - 3-3)
- Move the deflection yoke forward and adjust so that the entire screen becomes red. (See Fig. 3-1)
- Switch the raster signal to blue, then to green and verify the condition.
- When the position of the deflection yoke has been decided, fasten the deflection yoke with the screws.
- If the beam does not land correctly in all the corners, use a magnet to adjust it. (See Fig. 3-4)

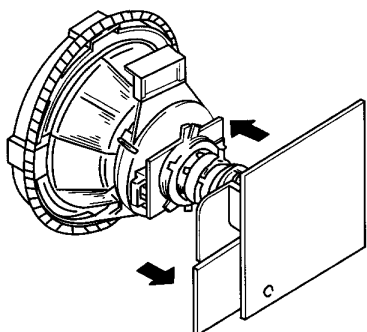


Fig. 3-1

Fig. 3-2

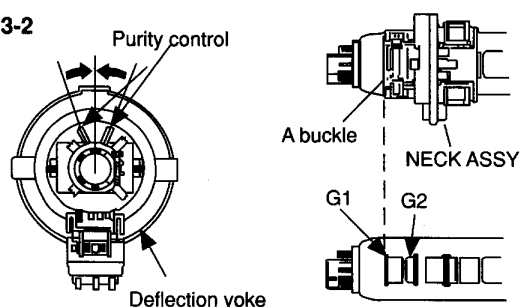


Fig. 3-3

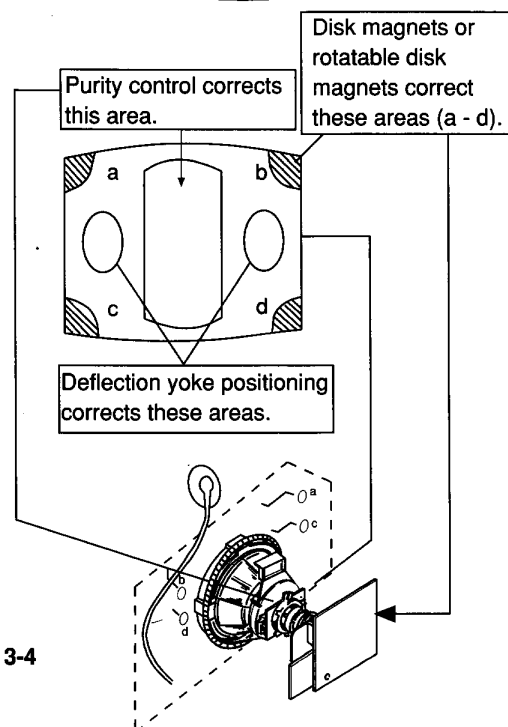
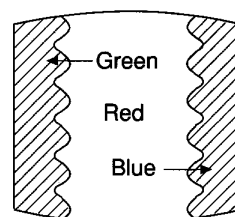


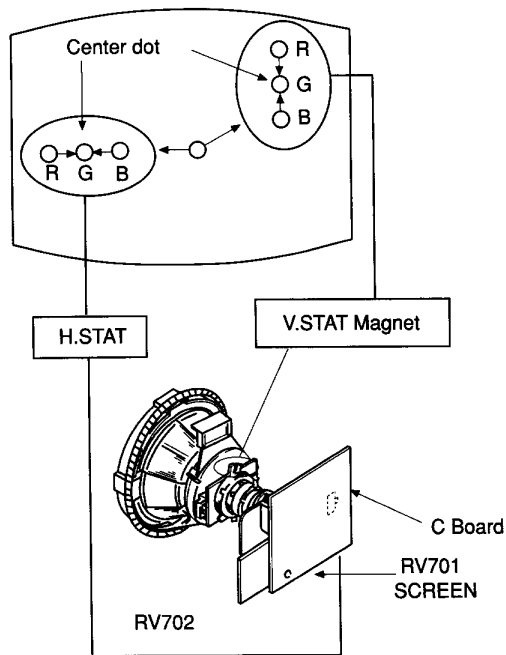
Fig. 3-4

3-2. CONVERGENCE

Preparation:

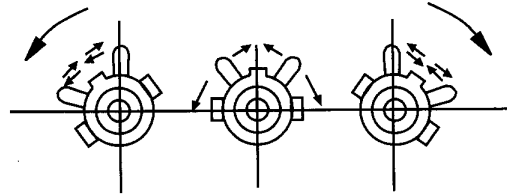
- Before starting this adjustment, adjust the focus, horizontal size, and vertical size.
- Minimize the brightness setting.
- Provide a dot pattern.

(1) Horizontal and vertical static convergence

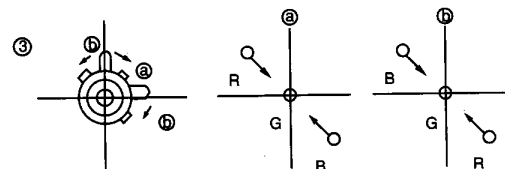
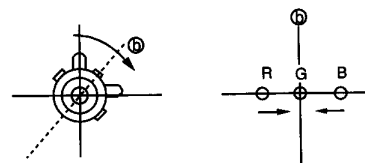
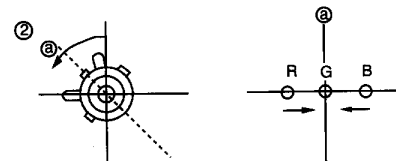
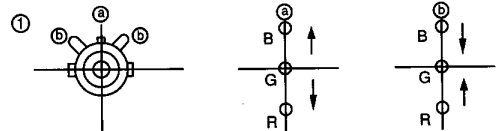


1. (Moving horizontally), adjust the H.STAT control so that the red, green, and blue points are on top of each other at the centre of the screen.
2. (Moving vertically), adjust the V.STAT magnet so that the red, green, and blue points are on top of each other at the centre of the screen.
3. If the H.STAT variable resistor cannot bring the red, green, and blue points together at the centre of the screen, adjust the horizontal convergence with the H.STAT variable resistor and the V.STAT magnet in the manner given below.
(In this case, the H.STAT variable resistor and the V.STAT magnet influence each other)

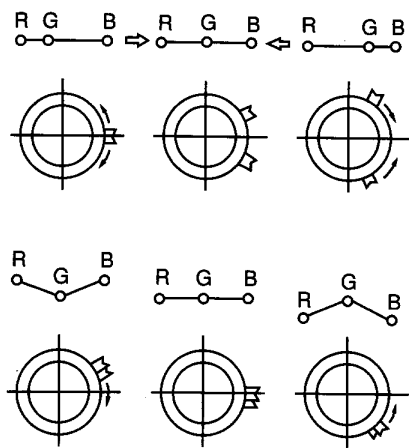
- Tilt the V.STAT magnet and adjust the static convergence by opening or closing the V.STAT magnet.



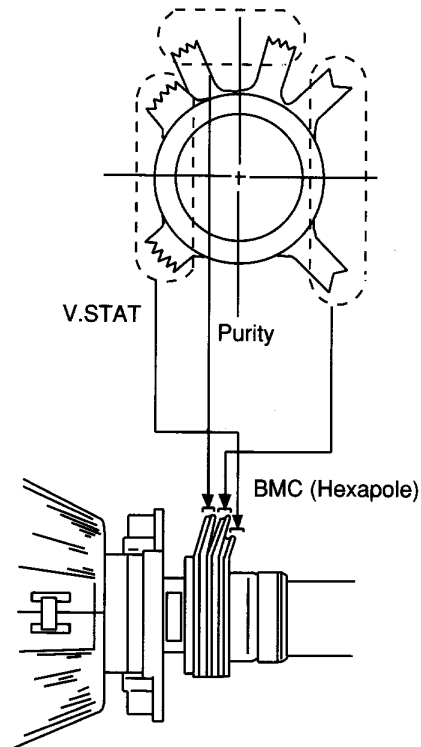
4. If the V.STAT magnet is moved in the direction of the (a) and (b) arrows, the red, green, and blue points move as shown below.



- Operation of BMC (Hexapole) Magnet



- The respective dot position resulting from moving each magnet interact, so be sure to perform adjustment while tracking.
Use the H.STAT VR to adjust the red, green, and blue dots so they coincide at the centre of the screen (by moving the dots in the horizontal direction).

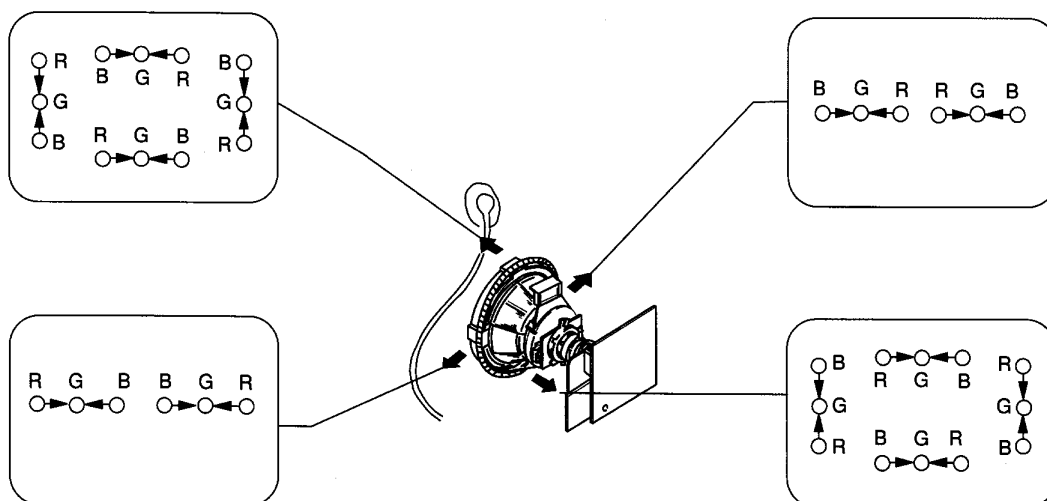


(2) Dynamic convergence adjustment.

Preparation:

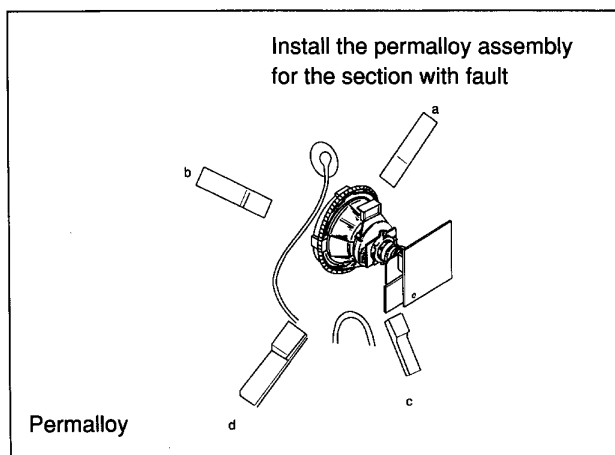
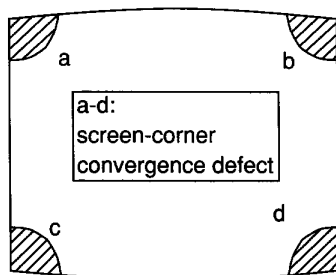
- Before starting this adjustment, adjust the horizontal static convergence and the vertical static convergence.
- Slightly loosen the deflection yoke screws.

- Remove the deflection yoke spacer.
- Move the deflection yoke as shown in the figure below and optimize the convergence.
- Tighten the deflection yoke screws.
- Re-install the deflection yoke spacer.



(3) Screen corner convergence.

If you are unable to adjust the corner convergence properly, correct them with the use of permalloy assemblies.

**3-3. WHITE BALANCE****G2 Setting**

1. Switch the set into AV mode (apply no signal to the AV connectors).
2. Connect a Volt Meter to Test Point 1 on the A board.
3. Adjust RV01 to obtain a voltage of $3.0V \pm 0.3V$.

White balance adjustment

1. Input an all white signal from the pattern generator.
2. Enter into the service mode.
3. Enter into Picture Adjustment service menu.
4. Select sub-contrast and adjust to 7.
5. Select the Green Drive and adjust so that the white balance becomes optimum.
6. Select the Blue Drive and adjust so that the white balance becomes optimum.
7. Press the TV button to return to TV operation.

PICTURE ADJUSTMENT

AFC mode	1
REF position	2
SCP BGR	1
SCP BGF	1
Trap Fo	0
Sub contrast	Adj
Sub colour	Adj
Sub brightness	Adj
Sub hue	Adj
Green drive	Adj
Blue drive	Adj
Green cutoff	Adj
Blue cutoff	Adj
Gamma	0
Pre / overshoot	0
Y delay	3

SECTION 4

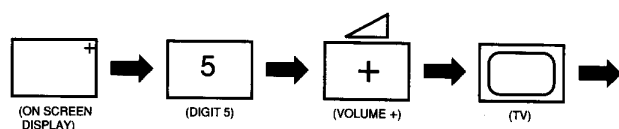
CIRCUIT ADJUSTMENTS

4-1. ELECTRICAL ADJUSTMENTS

Service adjustment to this model can be performed with the supplied remote commander RM-862.

HOW TO ENTER INTO SERVICE MODE

1. Turn on the main power switch of the set and enter into standby mode.
2. Press the following sequence of buttons on the Remote Commander.



"TT--" will appear in the top right corner of the screen. Other status information will also be displayed.

3. Press MENU on the commander to obtain the following menu on the screen.

TEST MENU

> Picture adjustment
Geometry
Wide
MSP
IC status
Current TV status

4. Move to the corresponding adjustment using the ↓ button on the commander.
5. Press the + button to enter the selected adjustment.
6. Turn off the power to quit the service mode when adjustments are completed.

PICTURE ADJUSTMENT

AFC mode	1
REF position	3
SCP BGR	1
SCP BGF	1
Trap Fo	7
Sub contrast	Adj
Sub colour	Adj
Sub brightness	Adj
Sub hue	Adj
Green drive	Adj
Blue drive	Adj
Green cutoff	Adj
Blue cutoff	Adj
Gamma	0
Pre / overshoot	0
Y delay	5

GEOMETRY ADJUSTMENT

V Size	Adj
V Position	Adj
S Correction	Adj
V Linearity	Adj
H Size	Adj
H Position	Adj
Pin Amp	Adj
Pin Phase	Adj
AFC Bow	Adj
AFC Angle	Adj
EHT V	Adj
EHT H	Adj
Corner Pin	Adj

WIDE

V Aspect	43
V Scroll	31
Upper V Lin	0
Lower V Lin	0
Left Blanking	1
Right Blanking	11

MSP

AGC ON/OFF	ON
Constant gain CDB	0
FM prescale FMP	36
Zwei mono-st WHI	36
Zwei st-mono WLO	18
Zwei mono-bi WMH	36
Zwei bi-mono WLO	18
Time zwei WML	41
Fawct limit	10
Fawct soll init FAW	12
Fawer tol	2
Nicam Err Max CCT	10
Nicam Err Min	0
Nicam Prescale NIP	97
Time Nicam	31
Carrier mute CRM	OFF
Audio clock ACO	HIZ
Scart prescale	25
Scart volume	64

IC STATUS (CXA2000 / CXA2040)**CXA2000**

H lock	1
IKR	1
VNG	0
X-RAY	0
Colour system	3
CV1 Sync	1

CXA2040

Sync sep	1
S1 mode pin	01
S2 mode pin	01

TUNER

Tuner status	01101011
--------------	----------

TV STATUS

Text system	C TEXT/TV TEXT
Dolby	NO/YES
Text language set	WEST/EAST/RUSSIAN
Menu language set	WEST/EAST/RUSSIAN
Destination	B/D/U/K/L/E/A/R
Scart 16:9	OFF/ON
RGB priority	OFF/ON
Ageing	OFF/ON
Size	29/25
Colour trap sw	SECAM/ALL
Velocity mod	ON/OFF
AFT STATUS	WINDOW/HIGH/LOW

SUB BRIGHTNESS ADJUSTMENT

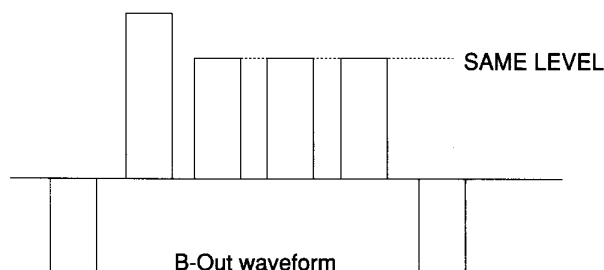
1. Input a Phillips pattern.
2. Set the picture control to minimum.
3. Enter into the Picture Adjustment Service Menu.
4. Adjust the Sub-Brightness data so that there is barely a difference between the 0 IRE and 10 IRE signal.

SUB CONTRAST ADJUSTMENT

1. Input a video that contains a small 100% area on a black background.
2. Set the picture control to maximum.
3. Connect an oscilloscope to pin 3 of CN301 (A board).
4. Enter into the Picture Adjustment Service Menu.
5. Adjust the Sub-contrast data to obtain a black to white amplitude of 2.50 volts.

SUB COLOUR ADJUSTMENT

1. Receive a PAL Colour Bar video signal.
2. Connect an oscilloscope to pin 3 of CN301 (A board).
3. Enter into the Picture Adjustment Service Menu.
4. Adjust the sub colour data so that cyan, magenta and blue colour bars are of equal height.



NOTE: The data shown in the TV STATUS table is dependant on destination, screen size and country.

SYSTEM B/G, D/K, I & L I.F. ADJUSTMENT

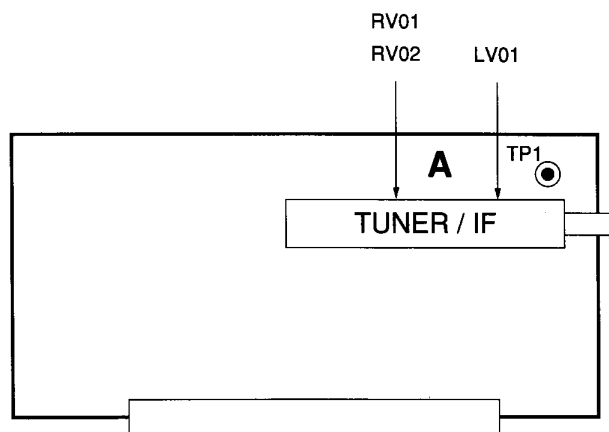
1. Input an off air signal of between 60-100dBuV / 75 ohm terminated, via the tuner socket.
2. Enter into the I.F. adjustment service mode (i.e. " TT 59 ") to fix the I.F frequency to 38.9 MHz.
3. Enter into the service mode and select "Current TVStatus".
4. Adjust the I.F coil (LV01) until the "AFT Status" indicates a " Window " condition.

SYSTEM L BAND 1 I.F. ADJUSTMENT

1. Input an off air signal of between 60-100dBuV / 75 ohm terminated, via the tuner socket.
2. Enter into the I.F. adjustment service mode (i.e. " TT 59 ") to fix the I.F frequency to 34.2 MHz.
3. Enter into the service mode and select "Current TVStatus".
4. Adjust the RV02 until the "AFT Status" indicates a " Window " condition.

TUNER AGC ADJUSTMENT

1. Receive a signal of 63dBuV / 75 ohm terminated via the tuner socket.
2. Measure the voltage at test point 1 (A board).
3. Adjust RV01 to obtain a voltage of $3.0V \pm 0.3V$.



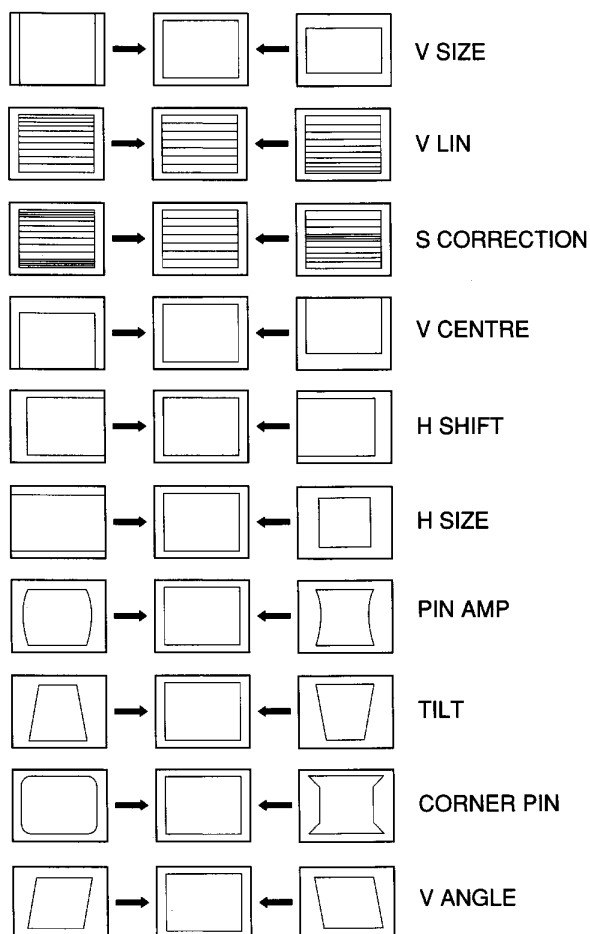
- A Board component side -

DEFLECTION SYSTEM ADJUSTMENT

1. Enter into the Geometry Adjustment Service Menu.
2. Select and adjust each item in order to obtain the optimum image.

GEOMETRY ADJUSTMENT

V Size	Adj
V Position	Adj
S Correction	Adj
V Linearity	Adj
H Size	Adj
H Position	Adj
Pin Amp	Adj
Pin Phase	Adj
AFC Bow	Adj
AFC Angle	Adj
EHT V	Adj
EHT H	Adj
Corner Pin	Adj



4-2. TEST MODE 2:

Is available by pressing Test button twice, OSD " TT " appears. The functions described below are available by pressing the two numbers. To release the Test mode 2, press 0 twice, or switch the TV into stand-by mode.

00	Switch test mode 2 off
01	Picture maximum
02	Picture minimum
03	Volume 30%
04	Set service menu mode
05	Set production menu mode
06	Volume 80%
07	Set ageing condition
08	Set shipping condition
09	Language reset
10	No function
11	Adjustment without OSD
12	Dummy
13	Display TV configuration
14	Forced AV 6:9 mode
15	Reset LPM from ROM data
16	copy LPM to reset memory
17	Preset label for AV sources
18	RGB priority on/off
19	Clear all preset labels
20	No function
21	Sub contrast
22	Sub colour
23	Sub brightness
24	Set destination = U
25	Set destination = D
26	Set destination = B
27	Set destination = K
28	Set destination = L
29	Set destination = E
30	No function
31	Set destination =A
32	Dummy
33	Auto AGC
34	Dummy
35	Manual AGC adjust

36-40	Dummy
41	Re-initialise NVM
42	Production use only
43	Initialise geometry settings
44	Initialise all favourite pages = 100
45	Channel locks = off
46	Dealer commander mode
47	Default MSP settings
48	Restore NVM test byte
49	Delete NVM test byte
50-60	No function
61	Turn on Dolby Pro Logic mode
62	White noise to left speaker
63	White noise to right speaker
64	White noise to centre speaker
65	White noise to rear speaker
66	Set standard stereo mode
67	Set Pro Logic normal mode
68	Set Pro Logic wide mode
69	Set Pro Logic phantom mode
70	No function
71	Picture rotation on/off
72	Dolby register settings
74	No function
75	Reset picture colour balance
76	Reset picture geometry
77	Reset sound settings
78	Reset error codes in the NVM
79-99	No function

4-3. BE-3D SELF DIAGNOSTIC SOFTWARE

The identification of errors within the BE-3D chassis is triggered in 1 of 2 ways :- 1: Bus busy or 2: Device failure to respond to IIC. In the event of one of these situations arising the software will first try to release the bus if busy (Failure to do so will report with continuous flashing LED) and then communicate with each device in turn to establish if a device is faulty. If a device is found to be faulty the relevant device number will be displayed through the led (Series of flashes which must be counted) See Table 1, non fatal errors are reported with this method.

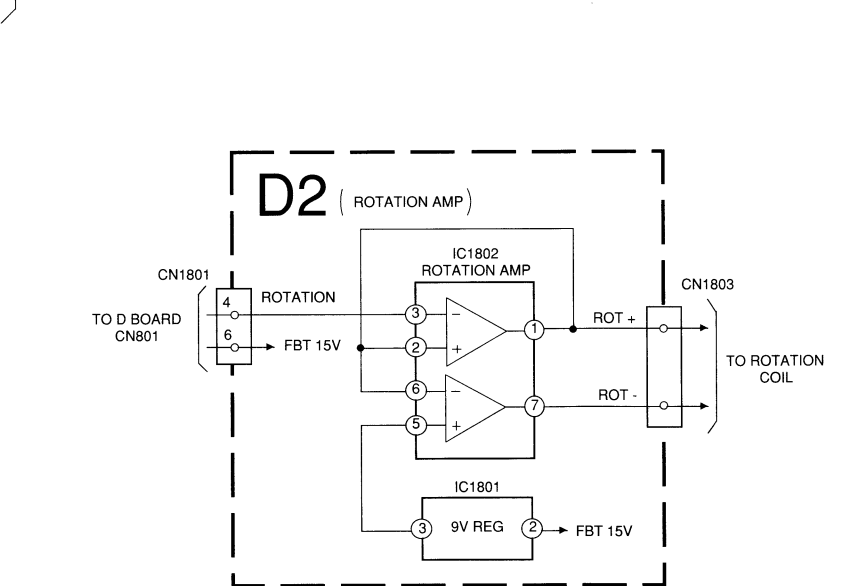
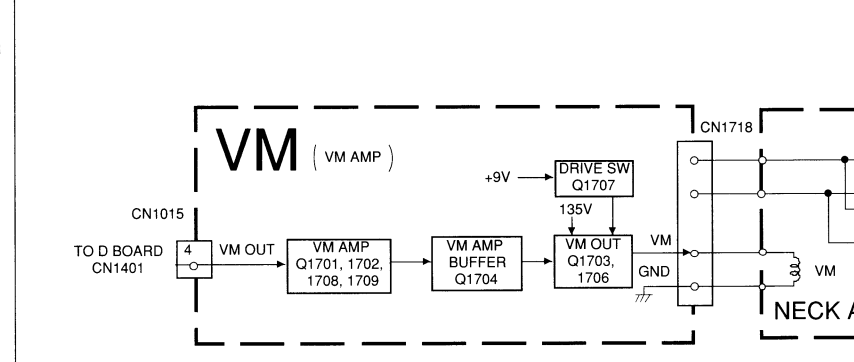
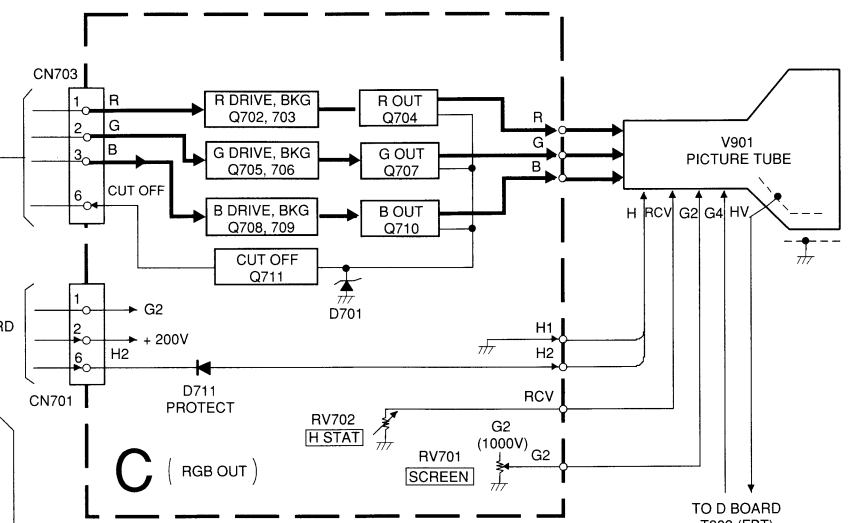
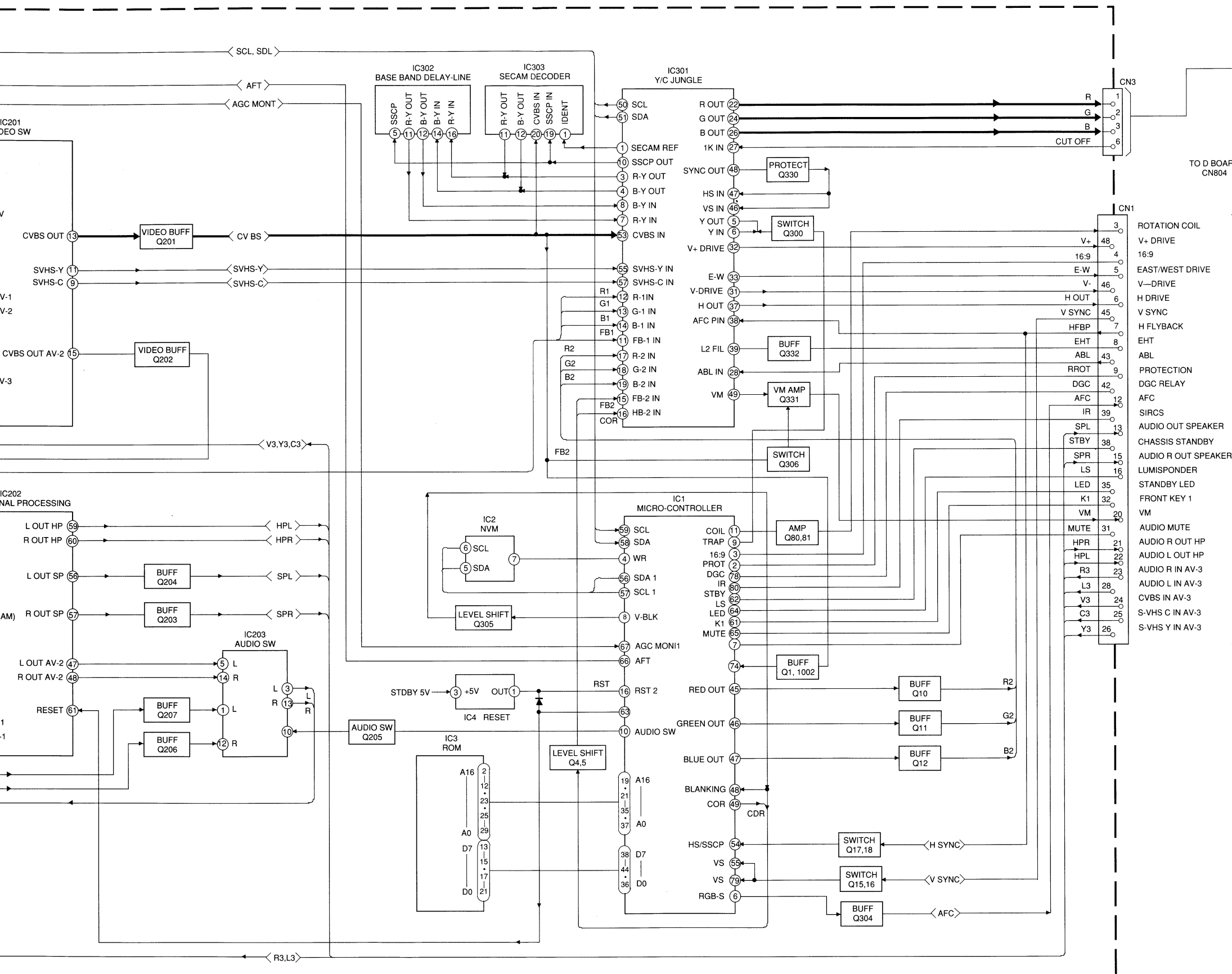
Table 1

ERROR	LED ERROR COUNT
Protection circuit trip < ANY TIME >	02
IIC SCL LOW < POWER UP ONLY >	03
IIC SDA LOW < POWER UP ONLY >	04
IIC SDA & SCL LOW < POWER UP ONLY >	05
Jungle/Chroma controller no acknowledge < POWER UP ONLY >	06
Video Switch no acknowledge < POWER UP ONLY >	07
Tuner no acknowledge	08
MSP no acknowledge	09
NVM no acknowledge	10
M3L TXD LOW < POWER UP ONLY >	11
M3L RXD LOW < POWER UP ONLY >	12
M3L ENABLE LOW < POWER UP ONLY >	13
M3L TXD & RXD LOW < POWER UP ONLY >	14
Compact Text test fail < POWER UP ONLY >	15
AV switch cannot power on reset	16
Cannot initialise jungle	17
NVM acknowledge fail after initialisation	18
Multiple devices with no acknowledge < POWER UP ONLY >	19
Compacttext run-time failure	20
AVSWITCH response failure after power up	21
JUNGLE/CHROMA controller response failure after power up	22
CompactText does not respond	23

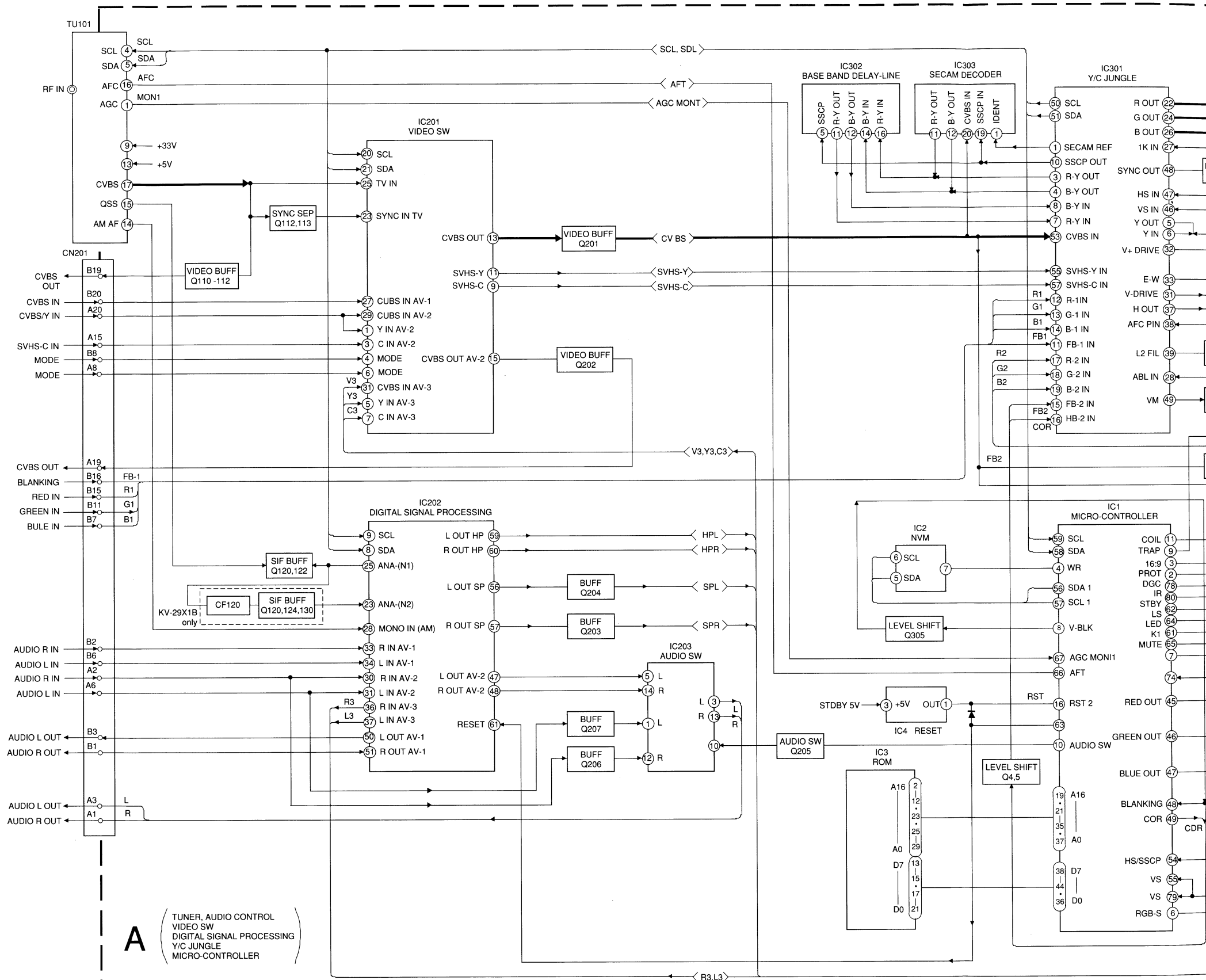
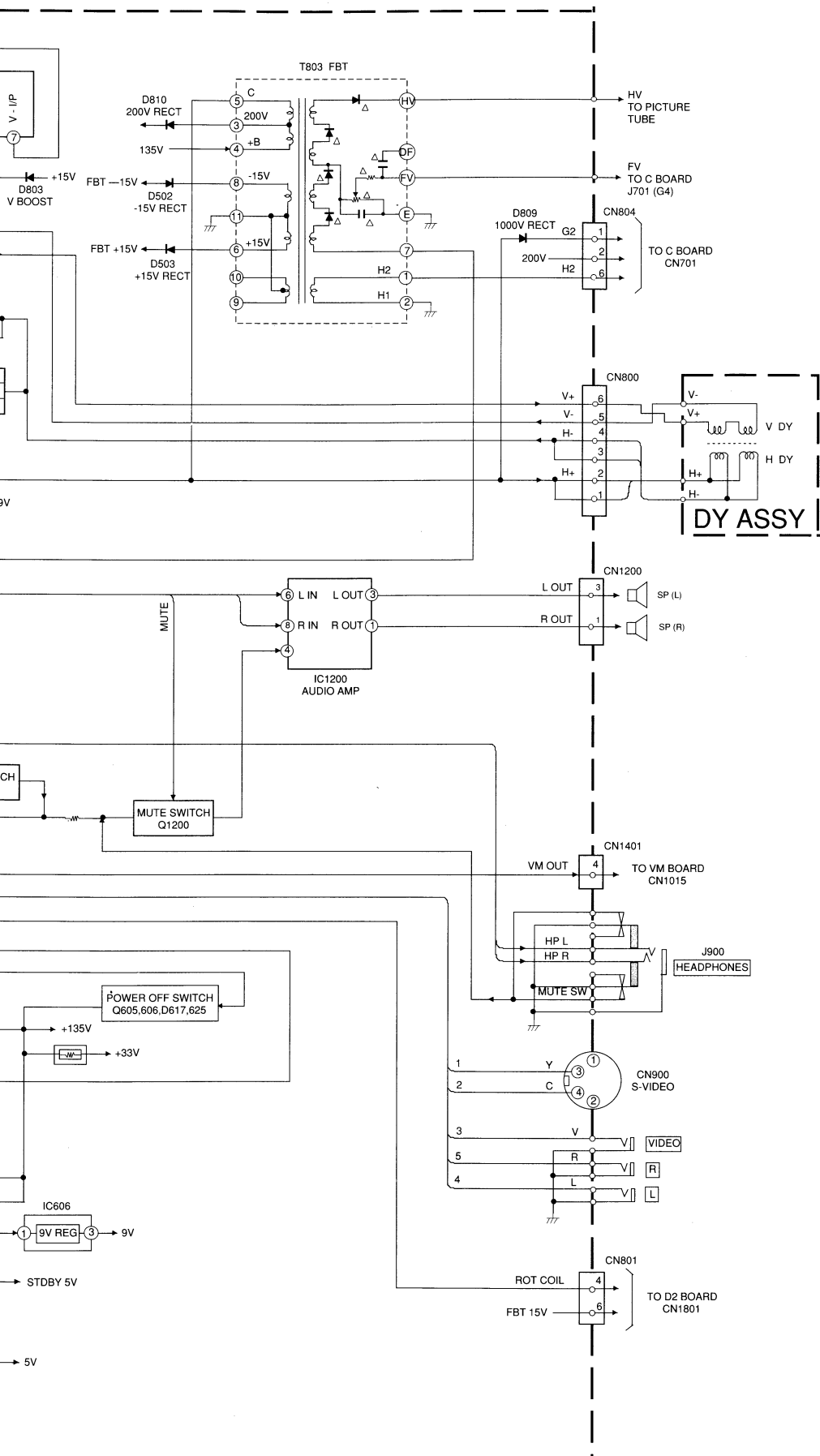
Flash Timing Example : e.g. error number 3.

Stby LED





BLOCK DIAGRAM (2)

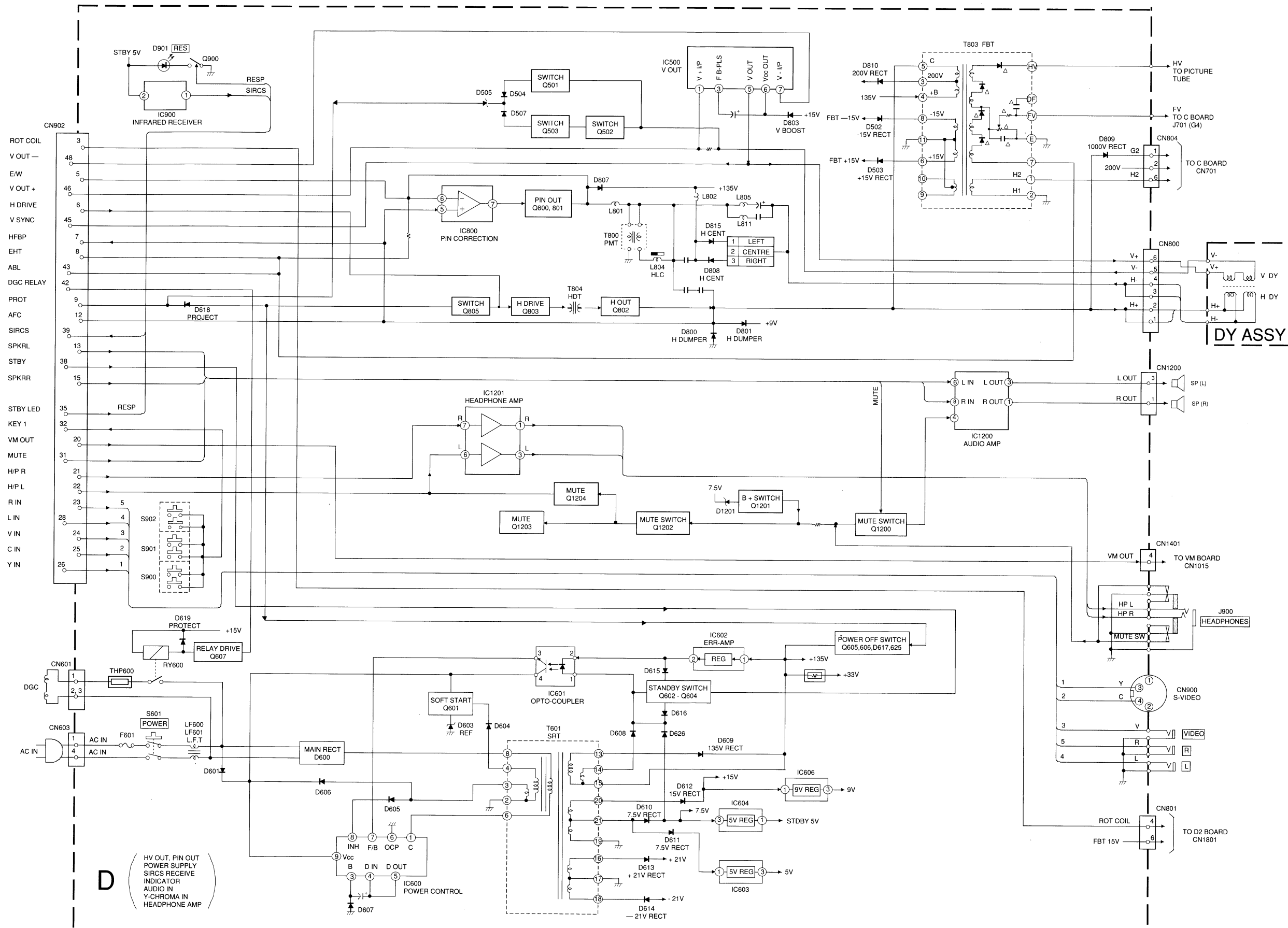


SECTION 5 DIAGRAMS

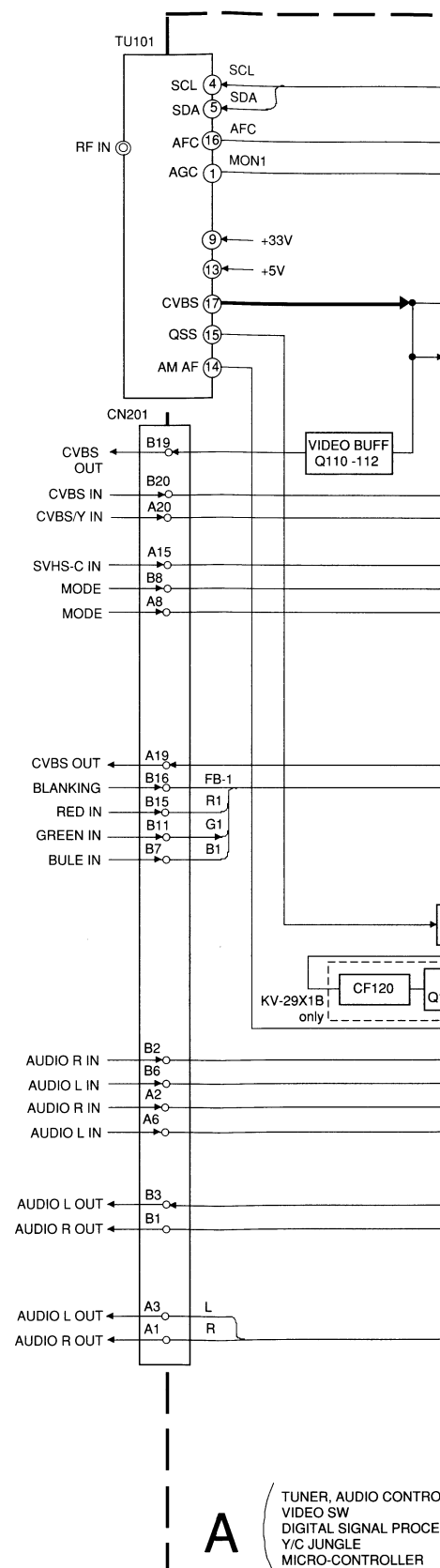
KV-29X1

KV-29X1

5-1. BLOCK DIAGRAM (1)



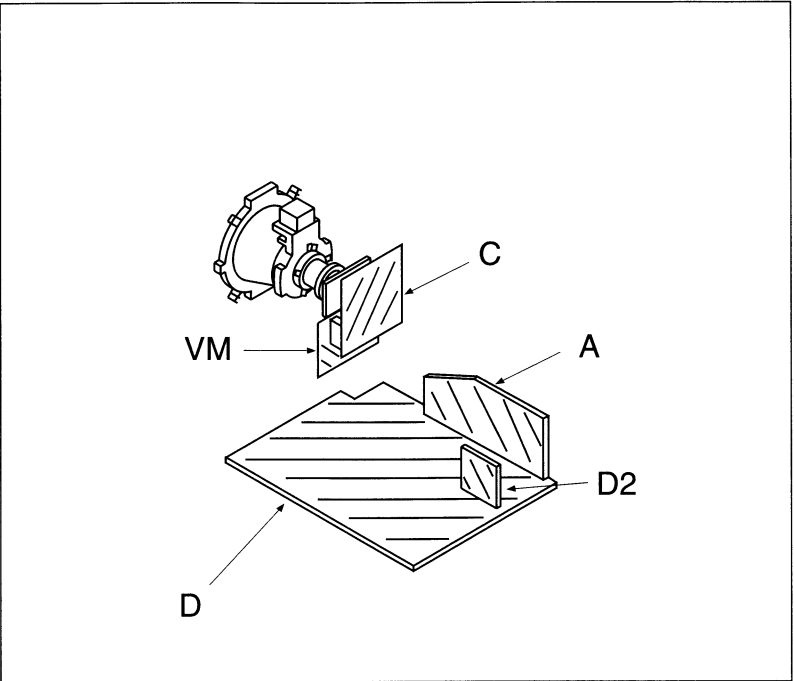
BLOCK DIAGRAM (2)



A

TUNER, AUDIO CONTROL
VIDEO SW
DIGITAL SIGNAL PROCESSOR
Y/C JUNGLE
MICRO-CONTROLLER

5-2. CIRCUIT BOARDS LOCATION



5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note :

- All capacitors are in μF unless otherwise noted. pF: μpF
50WV or less are not indicated except for electrolytic and tantalums.
- All resistors are in ohms.
k = 1000 , M = 1000K
- Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch : 5 mm
Rating electrical power $\frac{1}{4}$ W

- : nonflammable resistor.
- : internal component.
- : panel designation, or adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- \perp : earth - ground.
- /// : earth - chassis.
- $\#$: no mounted.

Note : The components identified by shading and marked are critical for safety. Replace only with the part number specified.

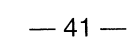
Note : Les composants identifiés par une trame et une marque sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

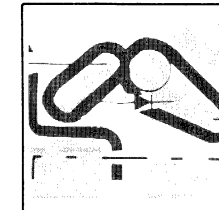
Reference information

RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: RW	NONFLAMMABLE WIREWOUND
	: \times	ADJUSTABLE RESISTOR
	: LF-8L	MICRO INDUCTOR
	: TA	TANTALUM
CAPACITOR	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

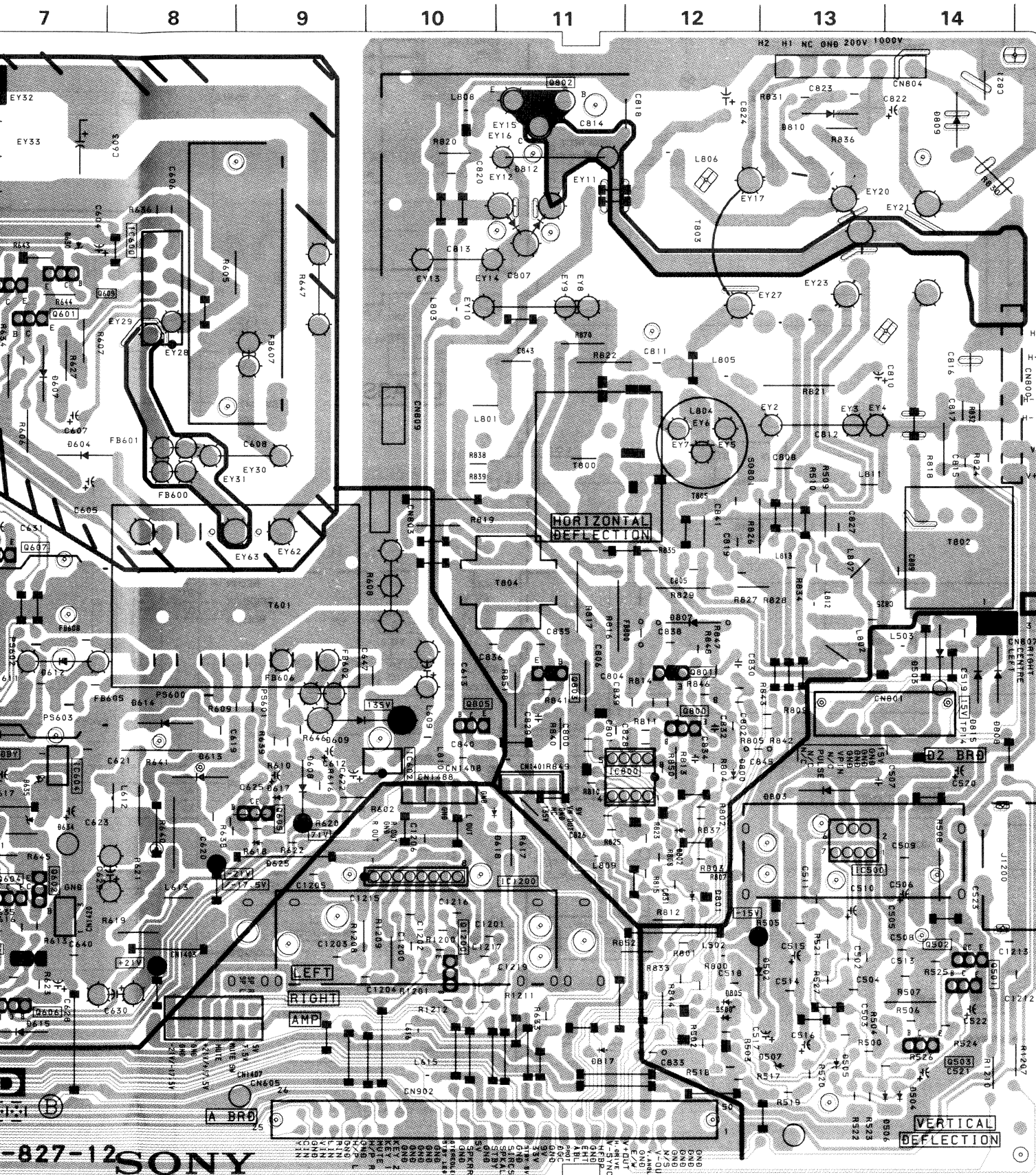
- Readings are taken with a colour-bar signal input.
- Readings are taken with 10M Ω digital multimeter.
- Voltages are dc with respect to ground unless otherwise noted.
- Voltage variations may be noted due to normal production tolerances.
- All voltages are in V.
- Circled numbers are waveform references.
- : B+ bus.
- : signal path. (RF)

D Board

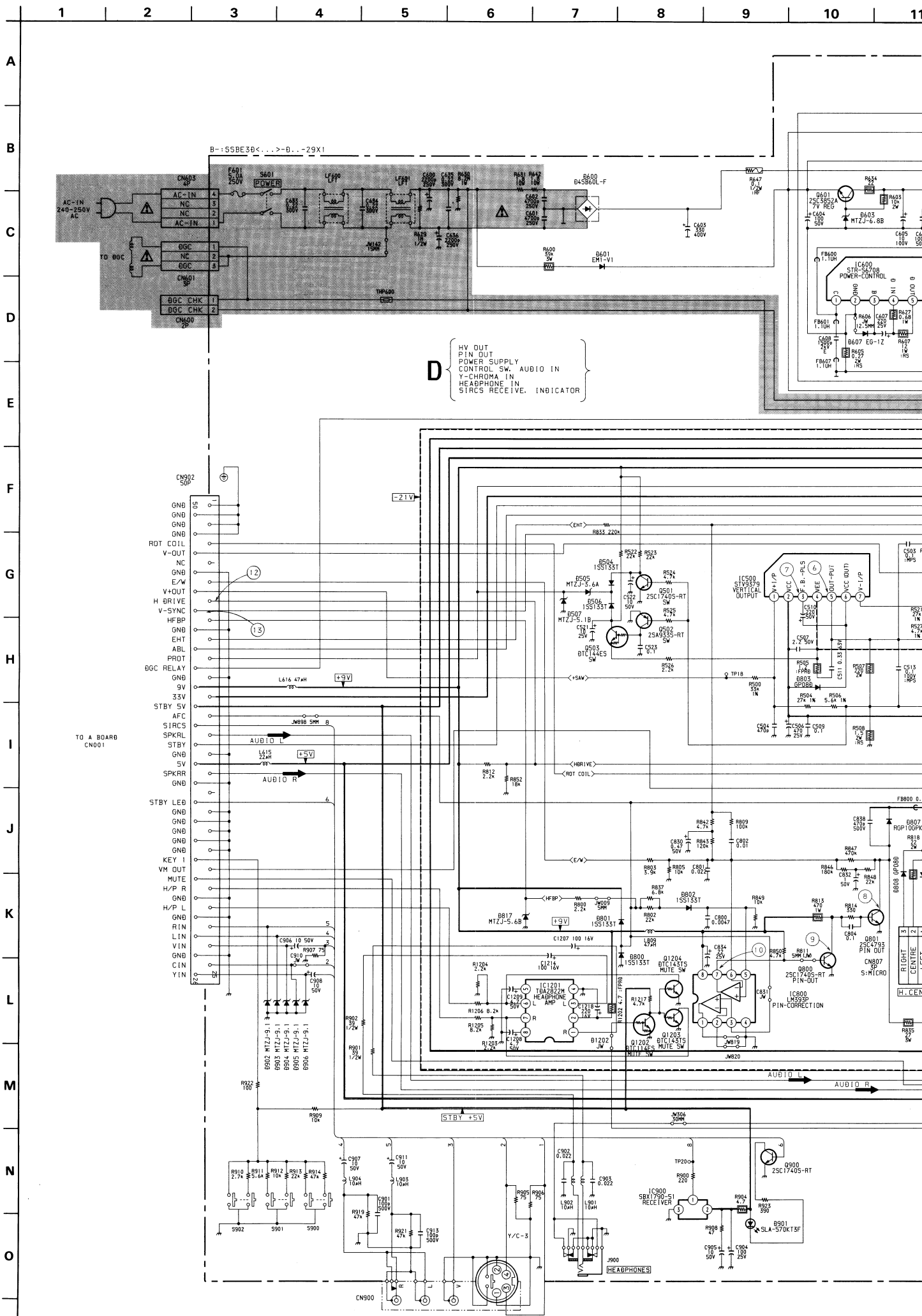


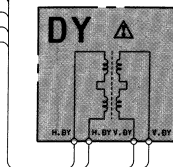
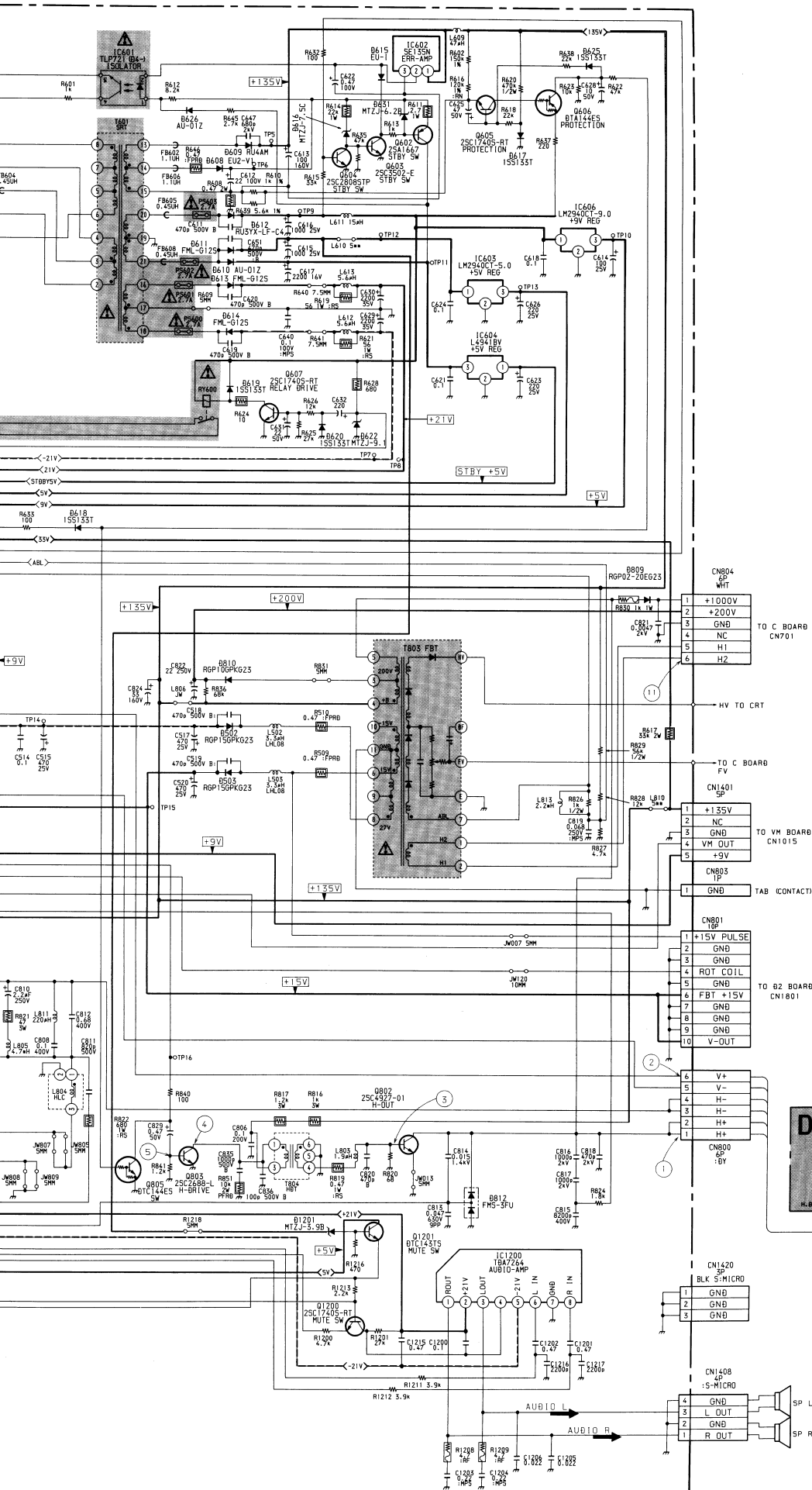
**NOTE:**

The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

**D BOARD**

IC		DIODE	
IC500	G-13	D600	A-7
IC600	B-8	D601	C-6
IC601	D-6	D603	C-7
IC602	F-10	D604	D-7
IC603	G-5	D605	C-6
IC604	F-7	D606	C-6
IC606	E-6	D607	C-7
IC800	F-12	D608	F-9
IC900	D-1	D609	F-9
IC1200	G-10	D610	F-7
IC1201	F-5	D611	F-6
		D612	E-7
		D613	F-8
		D614	F-8
		D615	H-7
		D616	G-7
		D617	F-9
		D618	F-11
		D619	E-6
		D620	E-6
		D622	E-6
		D625	G-9
		D626	G-6
		D631	F-6
		D800	F-12
		D801	G-12
		D802	G-12
		D803	F-13
		D807	E-12
		D808	E-14
		D809	A-14
		D810	A-13
		D812	B-11
		D815	E-14
		D817	H-11
		D901	C-1
		D902	I-5
		D903	H-4
		D904	H-5
		D905	I-5
		D906	I-5
		D1201	G-6





CN804	6P	WHT
1	+1000V	
2	+200V	
3	GND	
4	NC	
5	H1	
6	H2	

HV TO CRT

TO C BOARD FV

CN1401	5P	
1	+135V	
2	NC	
3	GND	
4	VM OUT	
5	+5V	

TO VM BOARD CN1015

CN803	1P	
1	GND	

TAB (CONTACT)

CN801	10P	
1	+15V PULSE	
2	GND	
3	GND	
4	ROT COIL	
5	GND	
6	FBT +15V	
7	GND	
8	GND	
9	GND	
10	V-OUT	

TO B2 BOARD CN1801

CN800	6P	BY
1	H+	
2	H+	
3	H+	
4	H+	
5	V+	
6	V+	

TO B2 BOARD CN1801

CN1420	3P	BLK 5-MICRO
1	GND	
2	GND	
3	GND	

TO B2 BOARD CN1801

CN1408	4P	5-MICRO
1	R OUT	
2	GND	
3	L OUT	
4	GND	

TO B2 BOARD CN1801

CN1408	4P	5-MICRO
1	R OUT	
2	GND	
3	L OUT	
4	GND	

TO B2 BOARD CN1801

CN1408	4P	5-MICRO
1	R OUT	
2	GND	
3	L OUT	
4	GND	

TO B2 BOARD CN1801

CN1408	4P	5-MICRO
1	R OUT	
2	GND	
3	L OUT	
4	GND	

TO B2 BOARD CN1801

CN1408	4P	5-MICRO
1	R OUT	
2	GND	
3	L OUT	
4	GND	

TO B2 BOARD CN1801

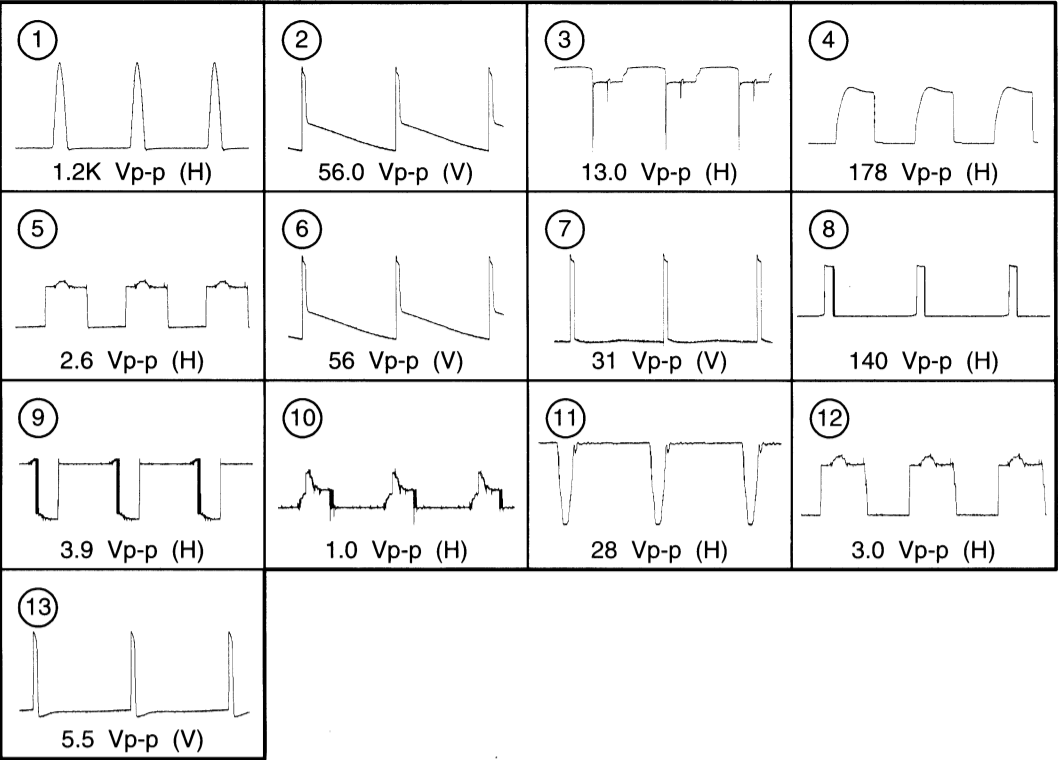
D BOARD
TRANSISTOR VOLTAGE TABLE

Transistor Voltage Table			
Ref No	B Base	C Collector	E Emitter
Q501	-0.1	0.2	-
Q502	0.1	-5.8	-
Q503	-5.8	-12.0	-12.0
Q602	72.0	7.5	72.7
Q603	0	72.0	-
Q604	0.7	-	-
Q605	0.5	-	0.3
Q606	-	-	12.0
Q607	-	12.0	-
Q800	0.2	3.1	-
Q801	0.3	17.0	-
Q802	-0.2	143.3	-
Q803	-0.6	99.8	-
Q805	-	3.6	-
Q900	-	5.4	-
Q1200	2.9	21.5	4.6
Q1201	3.4	5.0	3.0
Q1202	2.8	-	-

D BOARD IC VOLTAGE TABLE

IC Voltage Table		
Ref No	Pin No	Voltage (V)
IC500	1	1.5
	2	15.0
	3	-12.3
	4	-14.0
	5	0.1
	6	15.2
	7	1.4
IC600	1	170.0
	2	-62.4
	3	-62.6
	4	-62.2
	5	-62.0
	6	-62.6
	7	-62.4
	8	-62.0
	9	-58.0
IC601	1	64.3
	2	63.0
	3	-62.5
	4	-58.6
IC602	1	135.0
	2	63.2
	3	-0.1
IC800	3	0.9
	5	1.5
	6	2.0
	7	0.2
	8	9.0
IC1200	2	21.7
	4	21.5
	5	-21.7
IC1201	1	4.0
	2	9.0
	3	4.0
	5	0.5
	8	0.5

WAVEFORMS D BOARD

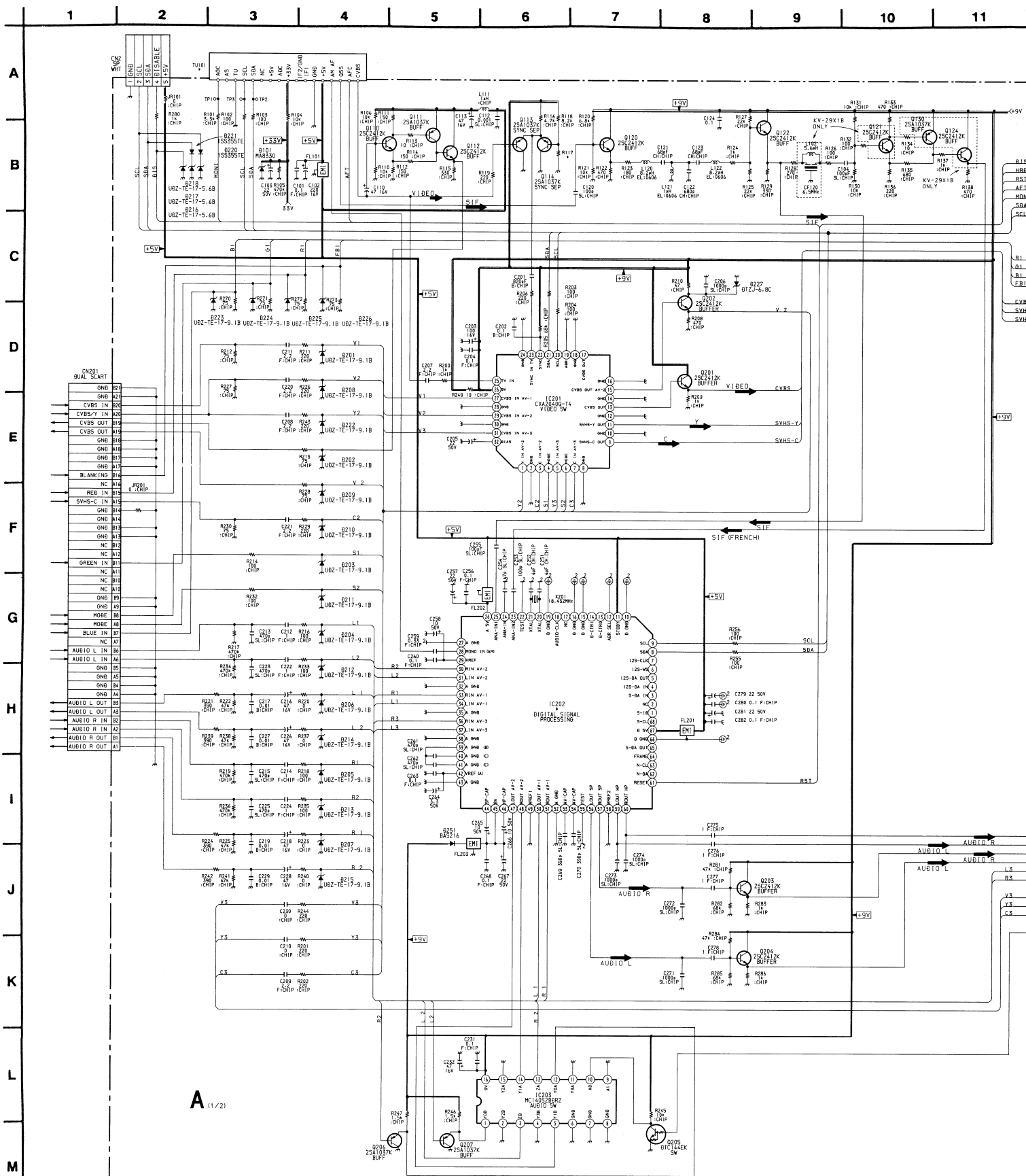


D BOARD
TRANSISTOR VOLTAGE TABLE

Transistor Voltage Table			
Ref No	B Base	C Collector	E Emitter
Q501	-0.1	0.2	-
Q502	0.1	-5.8	-
Q503	-5.8	-12.0	-12.0
Q602	72.0	7.5	72.7
Q603	0	72.0	-
Q604	0.7	-	-
Q605	0.5	-	0.3
Q606	-	-	12.0
Q607	-	12.0	-
Q800	0.2	3.1	-
Q801	0.3	17.0	-
Q802	-0.2	143.3	-
Q803	-0.6	99.8	-
Q805	-	3.6	-
Q900	-	5.4	-
Q1200	2.9	21.5	4.6
Q1201	3.4	5.0	3.0
Q1202	2.8	-	-

D BOARD IC VOLTAGE TABLE

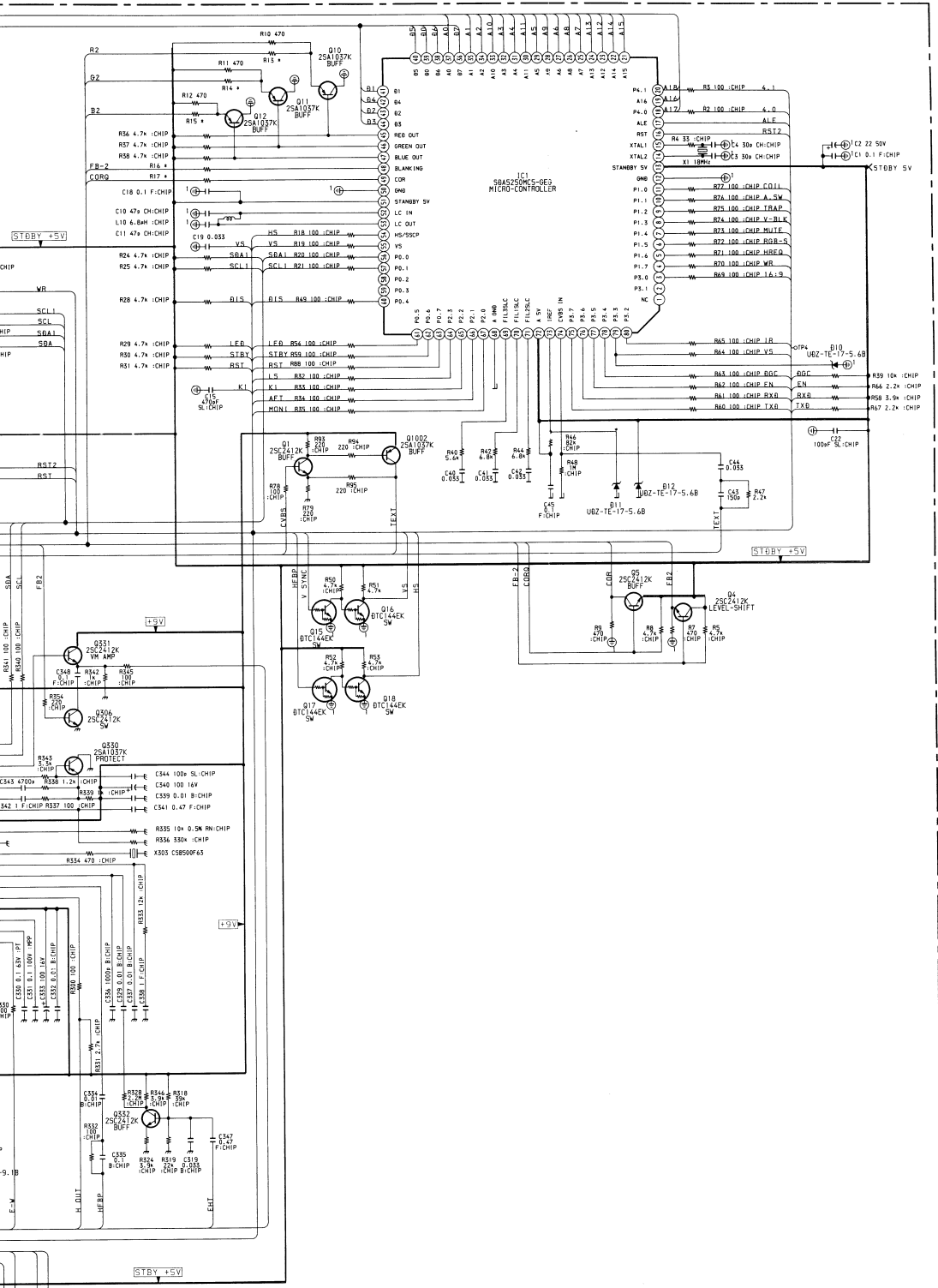
IC Voltage Table		
Ref No	Pin No	Voltage (V)
IC500	1	1.5
	2	15.0
	3	-12.3
	4	-14.0
	5	0.1
	6	15.2
	7	1.4
IC600	1	170.0
	2	-62.4
	3	-62.6
	4	-62.2
	5	-62.0
	6	-62.6
	7	-62.4
	8	-62.0
	9	-58.0
IC601	1	64.3
	2	63.0
	3	-62.5
	4	-58.6
IC602	1	135.0
	2	63.2
	3	-0.1
IC800	3	0.9
	5	1.5
	6	2.0
	7	0.2
	8	9.0
IC1200	2	21.7
	4	21.5
	5	-21.7
IC1201	1	4.0
	2	9.0
	3	4.0
	5	0.5
	8	0.5



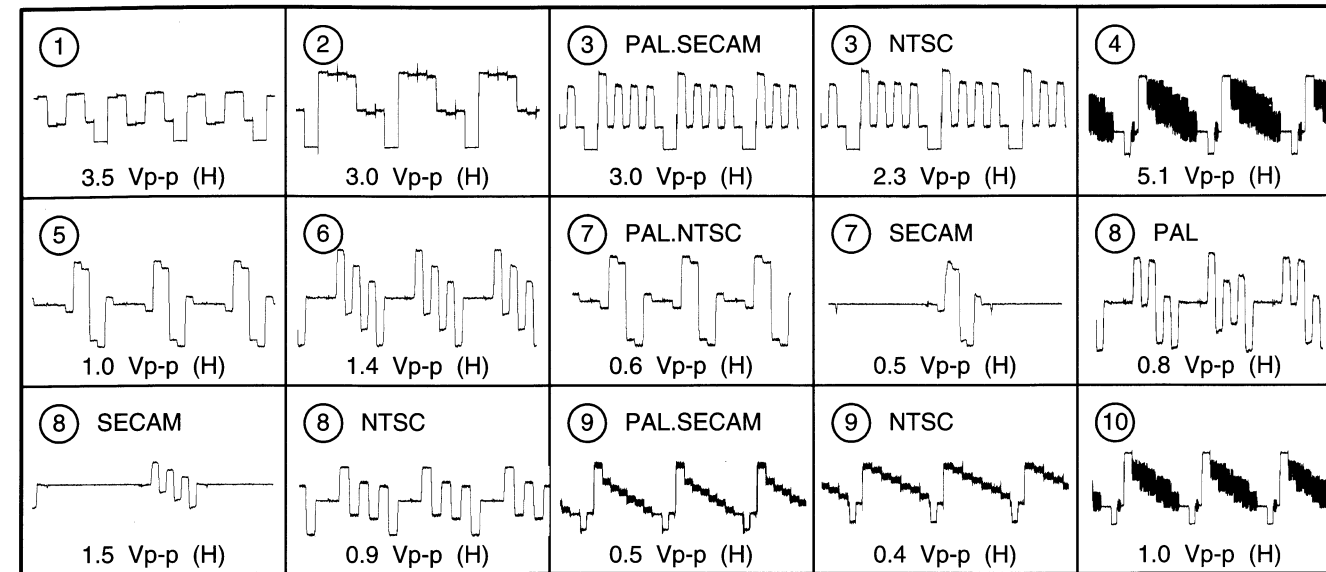
B-:SSBESD<...>A...-29X1

A BOARD * MARK

Model	29X1A	29X1B	29X1D	29X1E	29X1K	29X1L	29X1R	29X1U
Ref. No.								
C370	—	2.2UF	2.2UF	2.2UF	2.2UF	—	2.2UF	—
C372	—	0.1UF	0.1UF	0.1UF	0.1UF	—	0.1UF	—
C373	—	0.22UF	0.22UF	0.22UF	0.22UF	—	0.22UF	—
D370	—	BAS216	BAS216	BAS216	BAS216	—	BAS216	—
IC3	TMS27PC010A-15FMBE101	TMS27PC010A-15FMBE101	TMS27PC010A-15FMBE101	TMS27PC010A-15FMBE101	TMS27PC010A-15FMBE101	TMS27PC010A-15FMBE101	TMS27PC010A-15FMBE101	TMS27PC010A-15FMBE101
IC202	MSP3400C-PS	MSP3410-15	MSP3400C-PS	MSP3410-15	MSP3400C-PS	MSP3410-15	MSP3400C-PS	MSP3410-15
IC303	—	TDA8395T	TDA8395T	TDA8395T	TDA8395T	—	TDA8395T	—
R13	150	—	150	150	150	150	150	150
R14	150	—	150	150	150	150	150	150
R15	150	—	150	150	150	150	150	150
R16	100	—	100	100	100	100	100	100
R17	100	—	100	100	100	100	100	100
R117	1.8K	1.8K	1.8K	1.8K	1.8K	1.8K	1.8K	2.0K
TU101	TUVIF (AEP)	TUVIF (FR)	TUVIF (AEP)	TUVIF (AEP)	TUVIF (AEP)	TUVIF (AEP)	TUVIF (AEP)	TUVIF (UK)



WAVEFORMS A BOARD



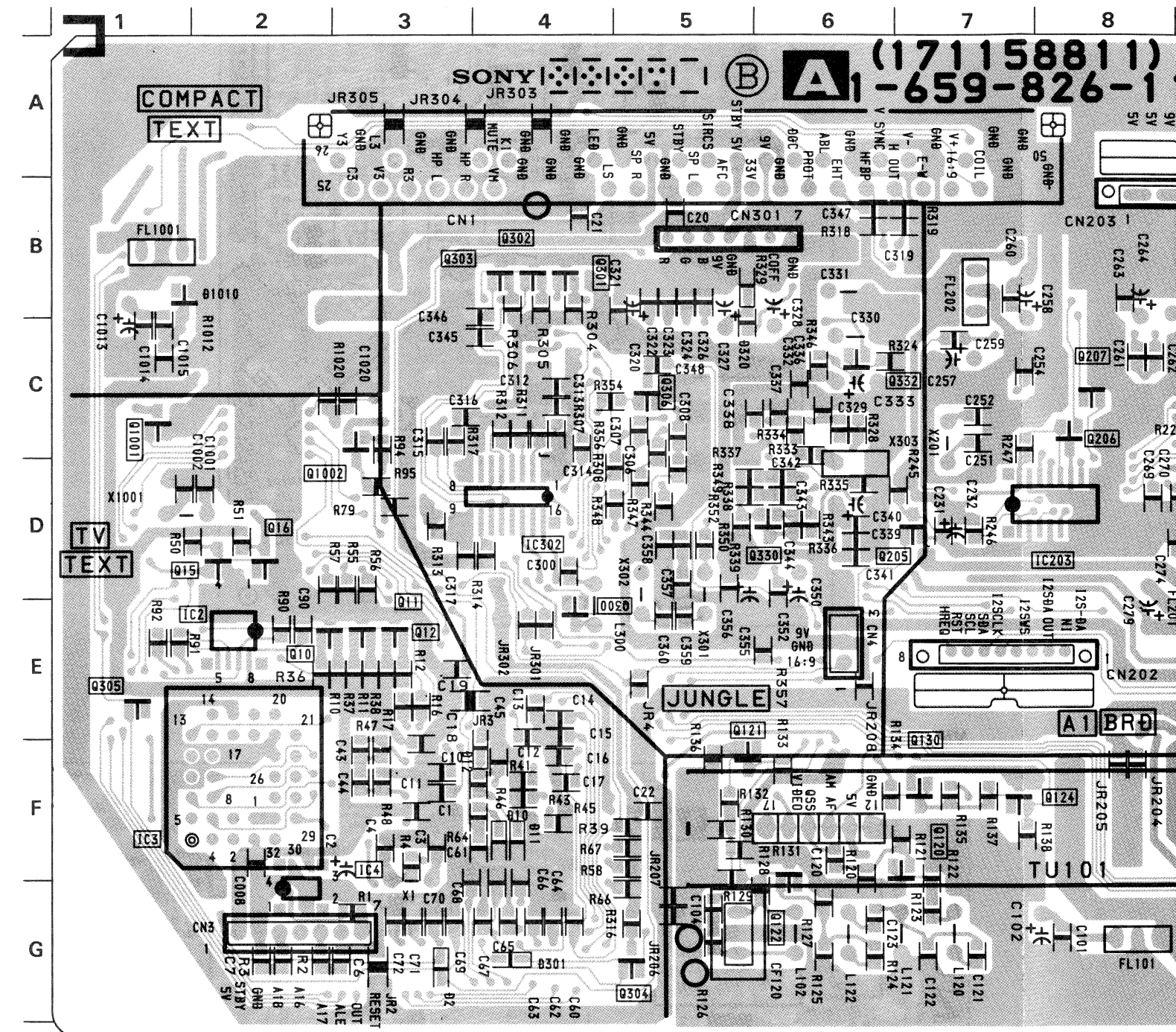
A (2/2) BOARD IC VOLTAGE TABLE

IC Voltage Table								
Ref No	Pin No	Voltage (V)	Ref No	Pin No	Voltage (V)	Ref No	Pin No	Voltage (V)
IC1	2	3.6	IC301	5	3.6	IC302	61	5.0
	3-4	4.8		6	5.0		62	7.6
	5	0.5		7-8	5.4		1	4.8
	7	4.8		10	0.6		5	0.7
	9	4.8		12-14	5.4		9	4.8
	11	2.4		16	4.0		11-12	3.0
	13	4.8		17-19	5.4		14	1.3
	14-15	2.3		20	8.8		16	1.3
	16-17	4.8		22-23	2.2		5	8.0
	48	4.0		24	2.0		3-2	10
	51	4.8	IC303	25	2.4		11	5.6
	52-53	2.4		26	2.0		0	19
	54	0.7		27	4.0		20	3.7
	55	0.2		28	6.6		4	0.2
	56-57	4.8		29	8.8		5	0.7
	58	2.8		31-33	3.0		4	0.2
	59	3.5		34	4.0		5	0.7
	60	2.4		35	4.6		6	1.7
	62	0.7		36	8.8		7	1.8
	63	4.4	IC1001	37	3.1		10	0.4
	65	4.8		38	3.4		11-12	4.8
	66	2.1		39	5.3		16	4.8
	67	2.0		40	4.2		17	0
	69-71	2.3		41	2.3		21	4.8
	72	4.8		43	1.7		23	3.0
	73	1.5		44	8.8		25	4.8
	74	1.2		45	2.5		56	0
	75-77	4.8		46	3.9		61	1.3
	79	0.2		47	3.0		62-63	1.4
	80	4.8		48	4.4		64	0
IC2	5-8	4.8		49	6.3		66	4.6
IC3	1	4.8		50-51	0.1		67	4.7
	31-32	4.8		53	3.9		68	4.0
IC4	1	4.8		54	5.0			
	3	4.8		55-56	4.2			
IC301	1	1.5		58-59	8.8			
	3-4	5.6		60	5.3			

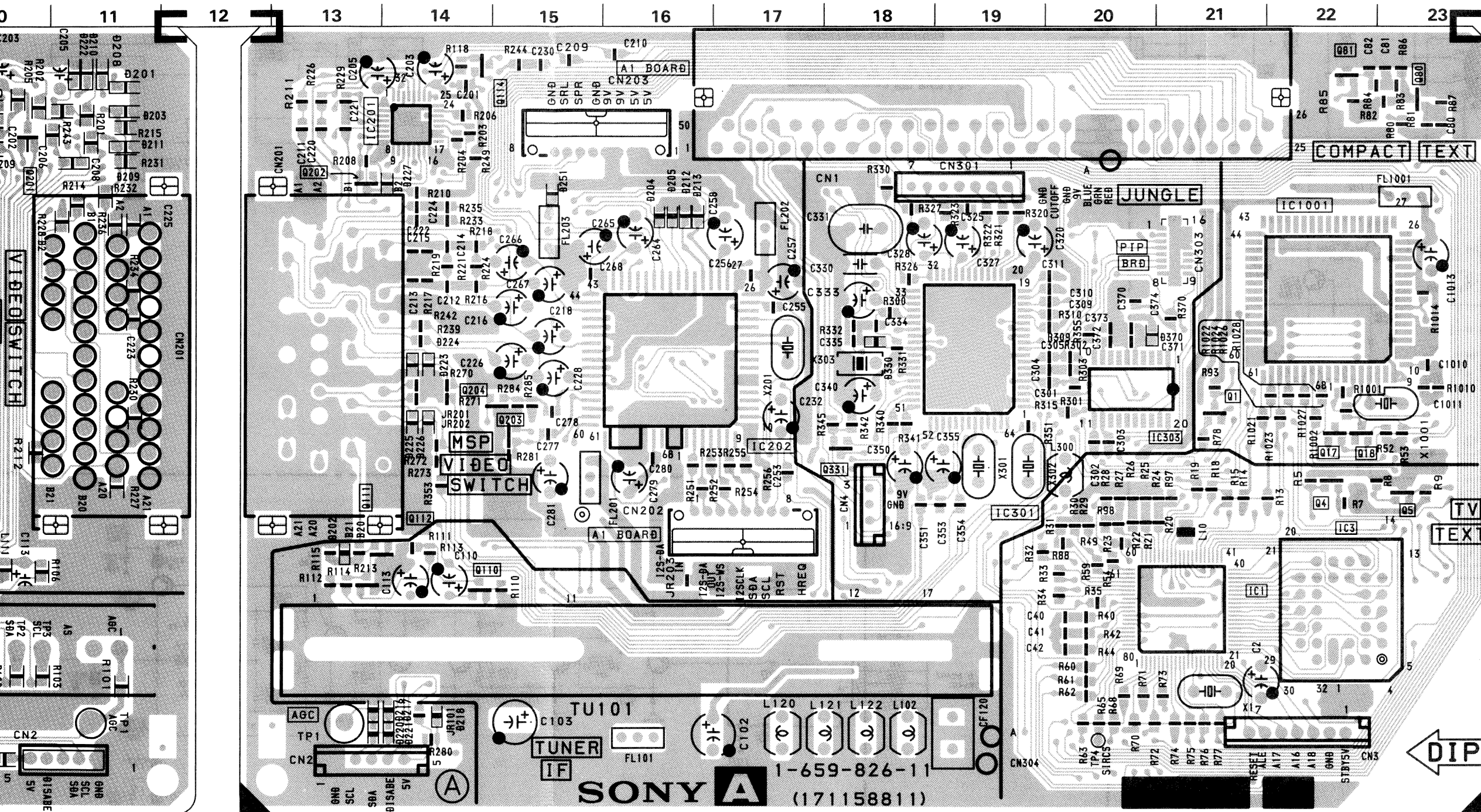
A

TUNER, AUDIO CONTROL VIDEO SW, DIGITAL SIGNAL PROCESSING
Y/C JUNGLE MICRO CONTROLLER

A Board <Conductor Side>

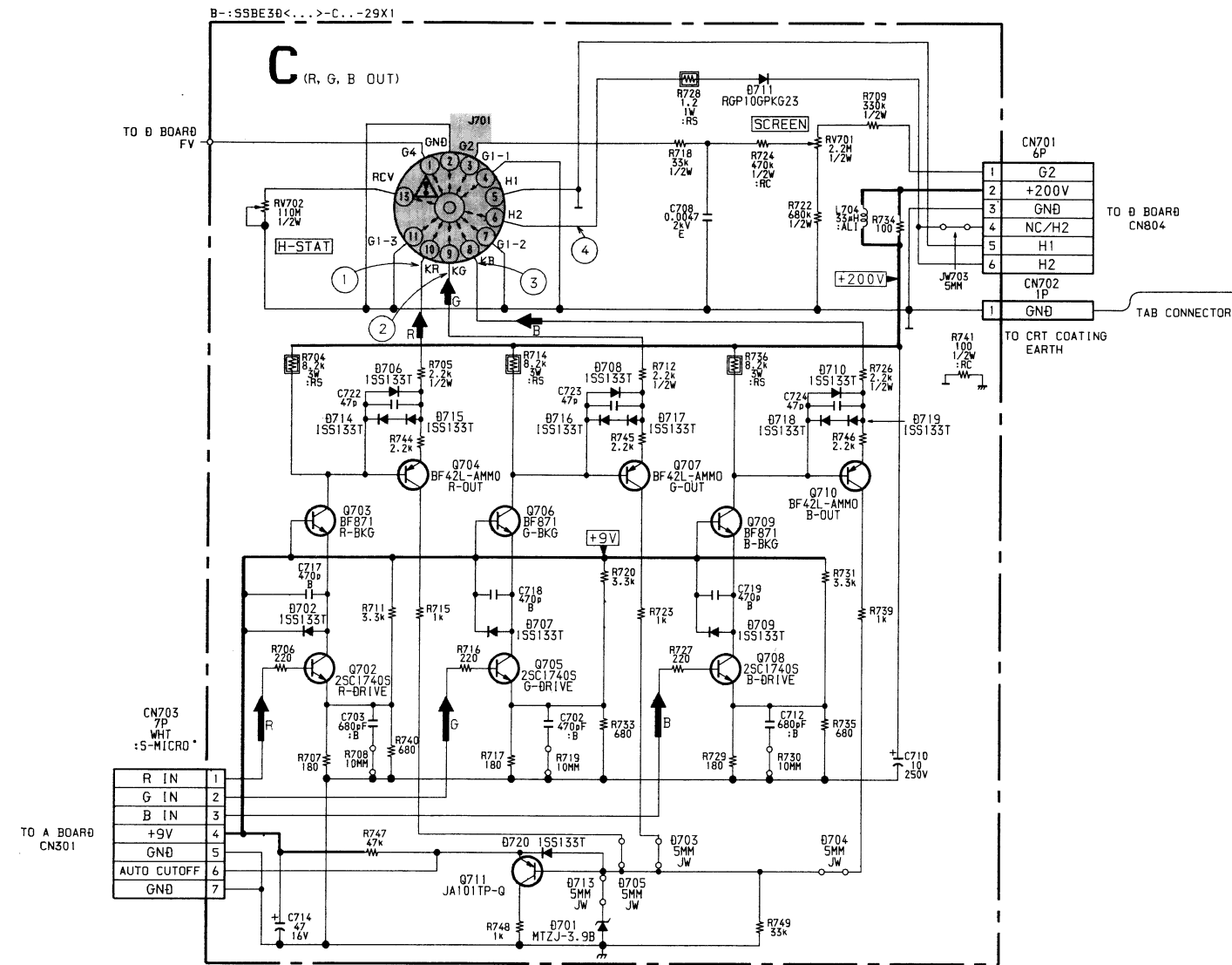


A Board <Component Side>

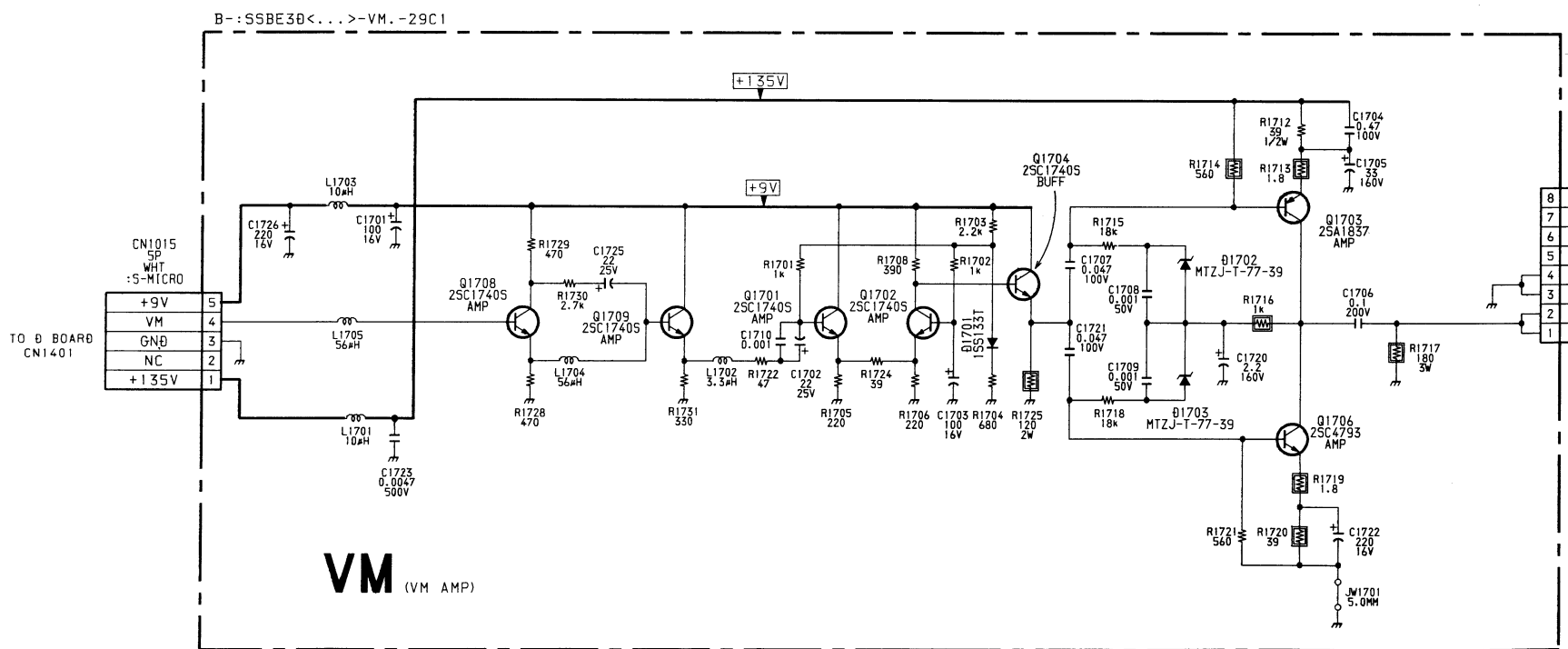
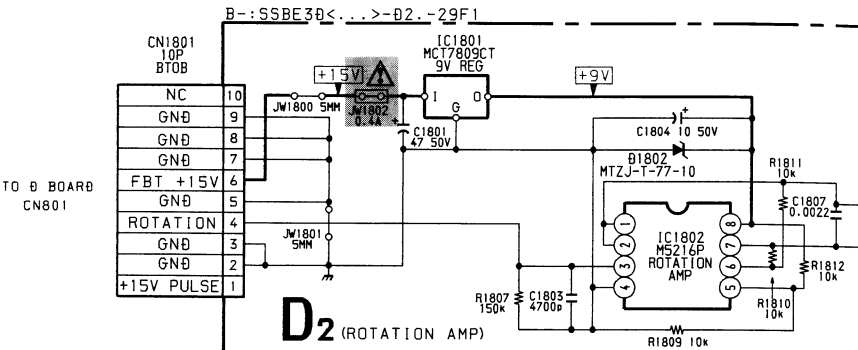
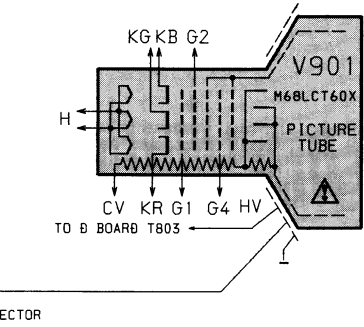
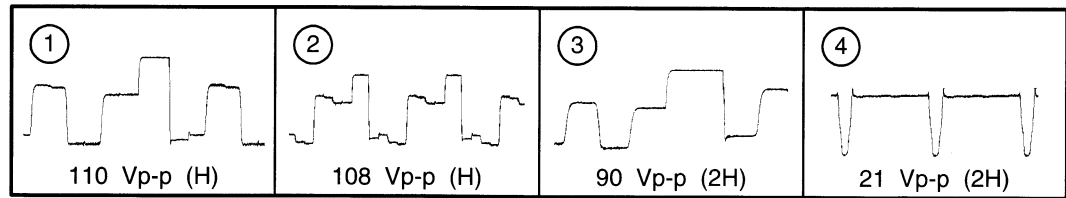


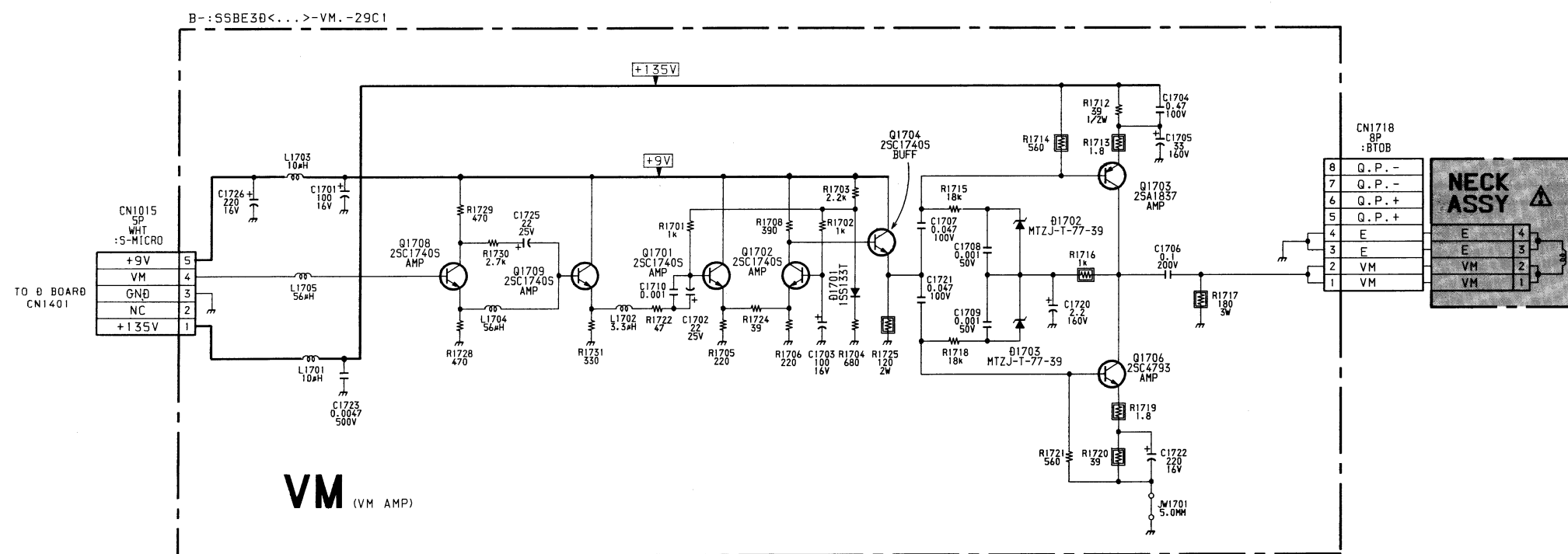
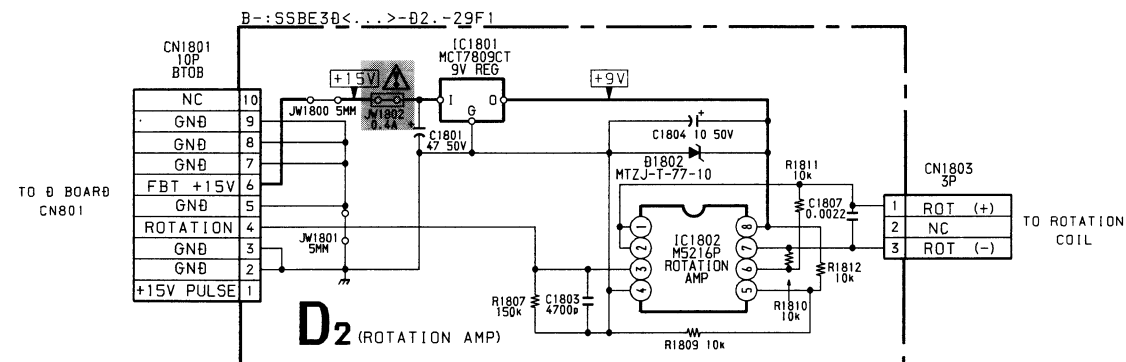
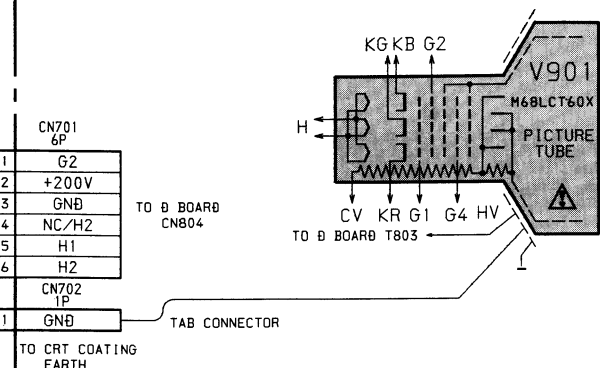
A BOARD

IC		Q305	E-1
IC1	F-21	Q306	C-5
IC2	E-2	Q330	D-6
IC3	F-2	Q331	D-18
IC4	G-2	Q332	C-6
IC201	A-14	Q1002	C-3
IC202	C-16	DIODE	
IC203	D-8	D2	G-3
IC301	C-19	D10	F-10
IC302	D-4	D11	F-10
IC303	D-21	D12	F-4
TRANSISTOR		D101	F-9
Q1	D-21	D201	A-11
Q4	E-22	D202	E-13
Q5	E-23	D203	A-11
Q10	E-2	D204	B-16
Q11	E-3	D205	B-16
Q15	D-2	D206	C-9
Q16	D-2	D207	C-9
Q17	D-22	D208	A-11
Q18	D-23	D209	B-11
Q80	A-23	D210	A-11
Q81	A-22	D211	B-11
Q110	F-14	D212	B-16
Q111	E-14	D213	B-16
Q112	E-14	D214	D-9
Q113	A-10	D215	D-9
Q114	A-14	D216	G-14
Q120	F-7	D217	G-14
Q121	F-5	D218	G-14
Q122	F-6	D220	G-14
Q124	F-7	D221	D-14
Q130	F-7	D222	D-14
Q201	B-10	D223	D-14
Q202	B-13	D224	D-14
Q203	D-15	D225	D-14
Q204	D-15	D226	D-14
Q205	D-7	D227	B14
Q206	C-8	D251	B-15
Q207	C-8	D320	C-5
Q300	E-4	D370	C-21
Q304	G-5		

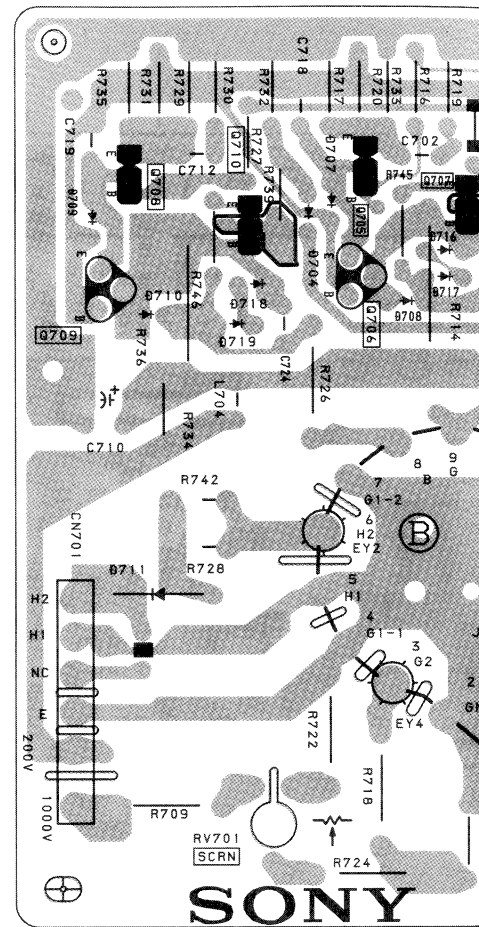


WAVEFORMS C BOARD

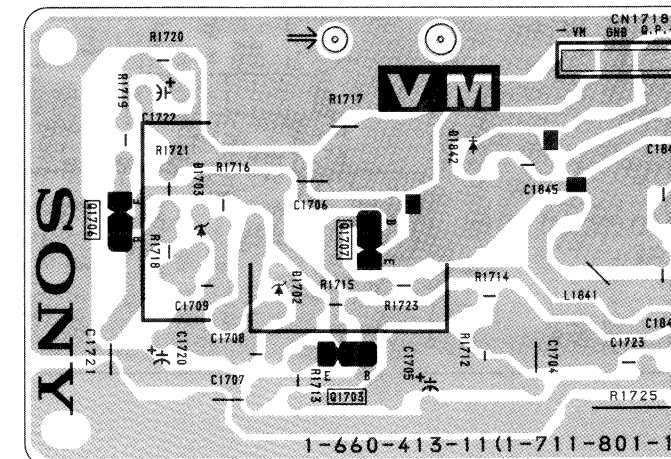




C Board



VM Board



C

[R, G, B OUT]

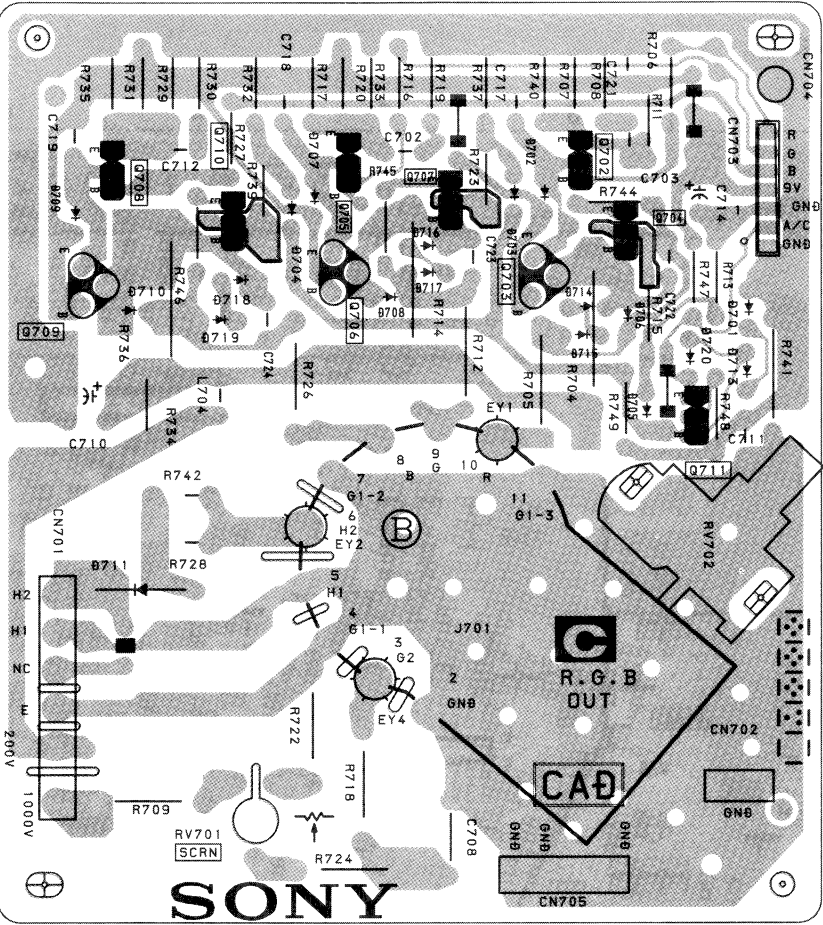
VM

[VM AMP]

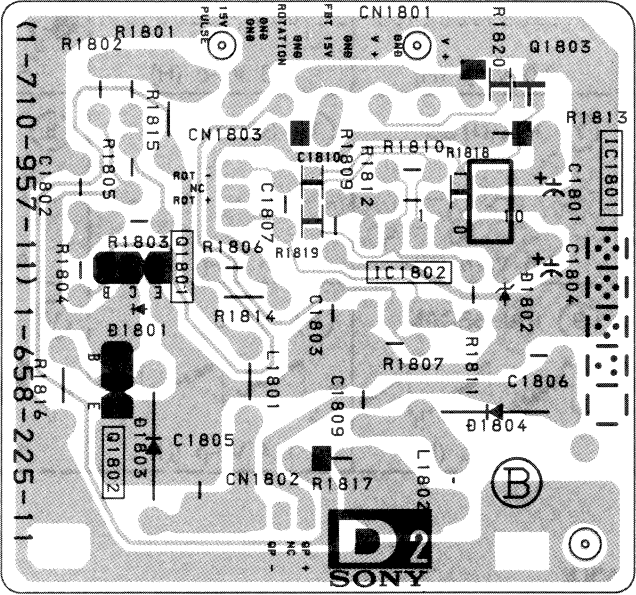
D2

[ROTATION AMP]

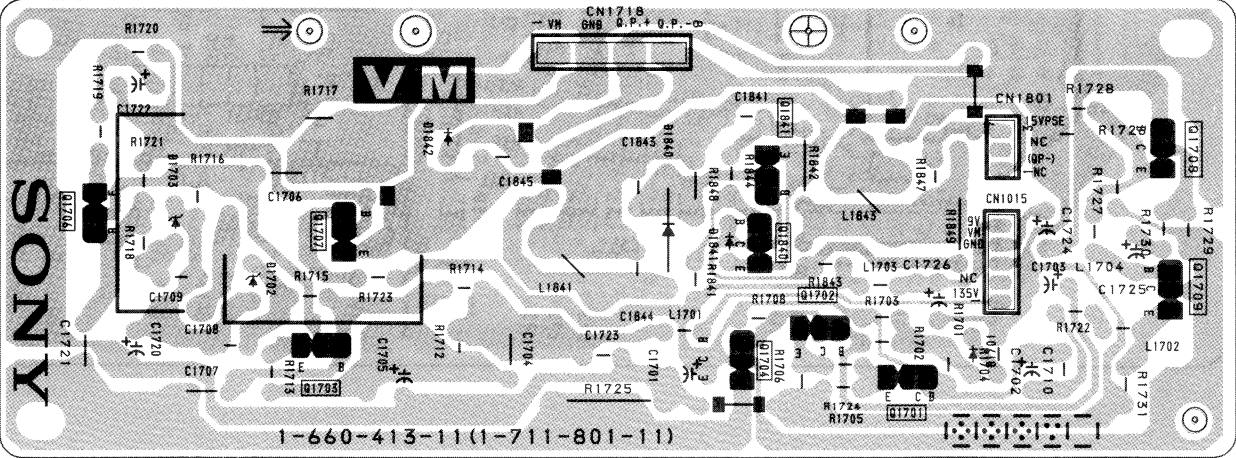
C Board



D2 Board



VM Board



C BOARD
TRANSISTOR VOLTAGE TABLE

Transistor Voltage Table				
Ref No	B Base	C Collector	E Emitter	
Q702	2.0	11.4	1.4	
Q703	12.0	168.3	11.4	
Q704	168.3	6.0	163.5	
Q705	1.7	11.4	1.2	
Q706	12.0	178.8	11.4	
Q707	178.2	6.2	173.8	
Q708	2.0	11.4	1.4	
Q709	12.0	168.3	11.4	
Q710	168.0	6.4	160.0	

VM BOARD
TRANSISTOR VOLTAGE TABLE

Transistor Voltage Table				
Ref No	B Base	C Collector	E Emitter	
Q1701	2.5	8.8	1.8	
Q1702	2.5	5.5	1.8	
Q1703	134.3	71.8	134.8	
Q1704	5.5	8.8	4.8	
Q1706	1.0	71.8	0.4	
Q1707	0.7	-	-	
Q1708	2.9	6.6	2.2	
Q1709	2.2	8.8	1.5	
Q1840	0.6	-	-	

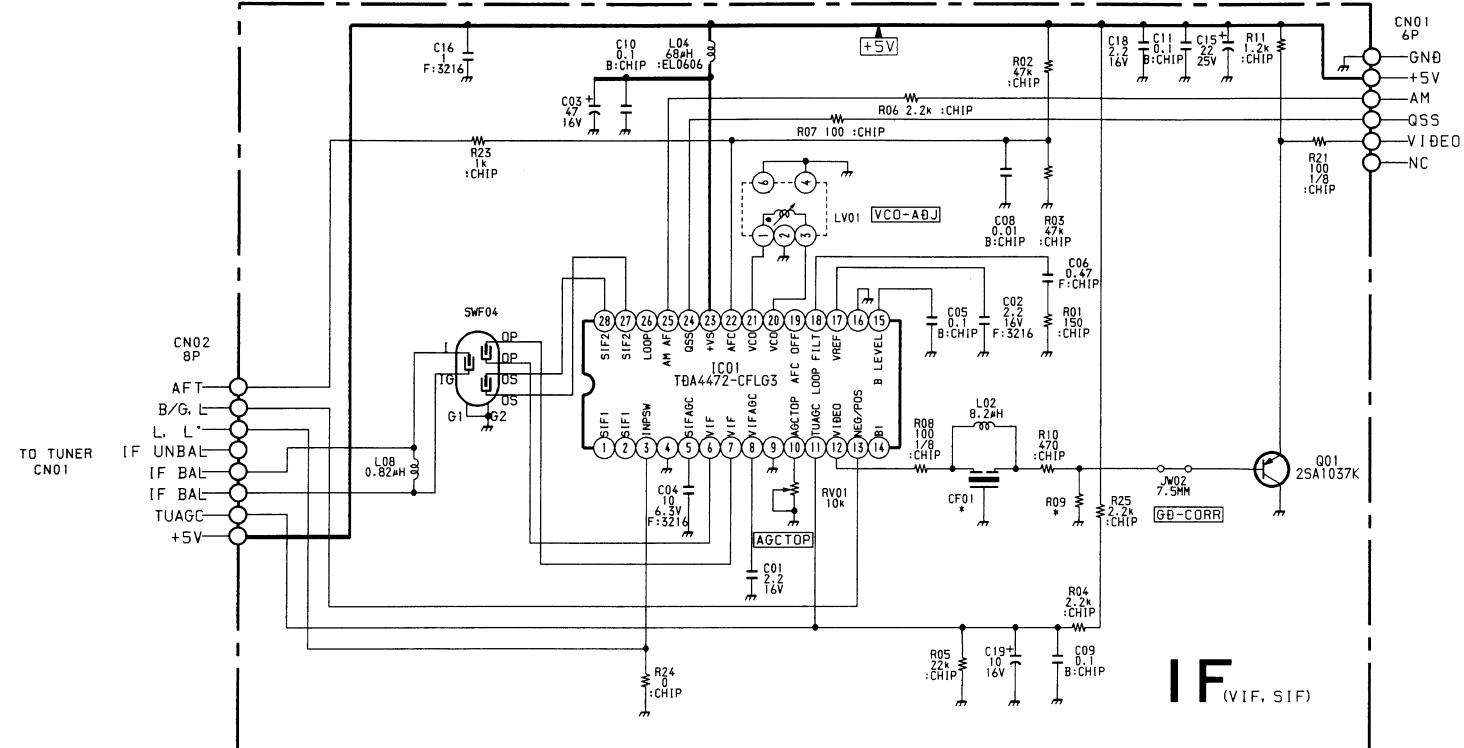
D2 BOARD IC VOLTAGE TABLE

IC Voltage Table		
Ref No	Pin No	Voltage (V)
IC1802	1-2	2.8
	3	3.0
	5-6	4.4
	7	6.2
	8	9.0

TUVIF (AEP) (KV-29X1A, 29X1D, 29X1E, 29X1K, 29X1L and 29X1R ONLY)

TUVIF (UK) (KV-29X1U ONLY)

B-#TVF-01<UK/AEP>-IF.

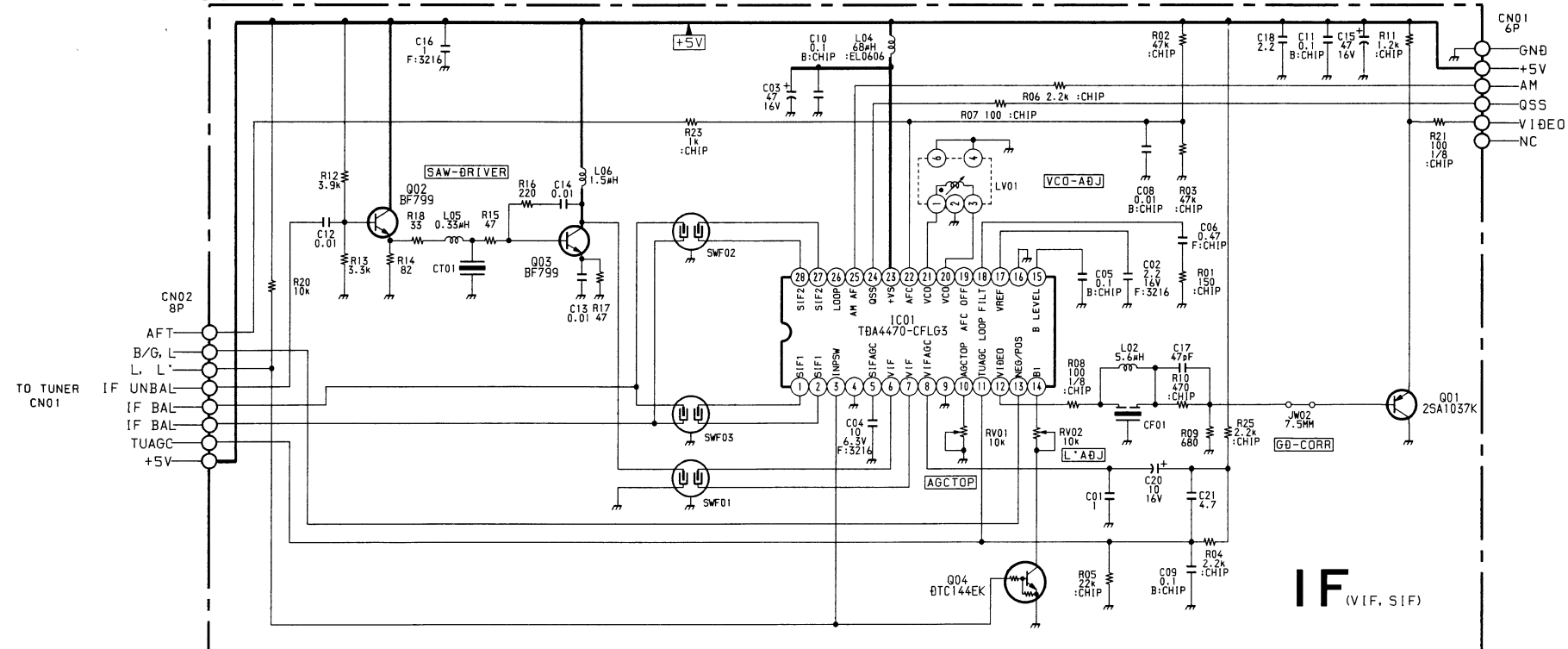


IF Board

Model Ref. No.	29X1A	29X1D	29X1E	29X1K	29X1L	29X1R	29X1U
CF01	5.5MHz	5.5MHz	5.5MHz	5.5MHz	5.5MHz	5.5MHz	6.0MHz
R09	680MF	680MF	680MF	680MF	680MF	680MF	1K

TUVIF (FR) (KV-29X1B ONLY)

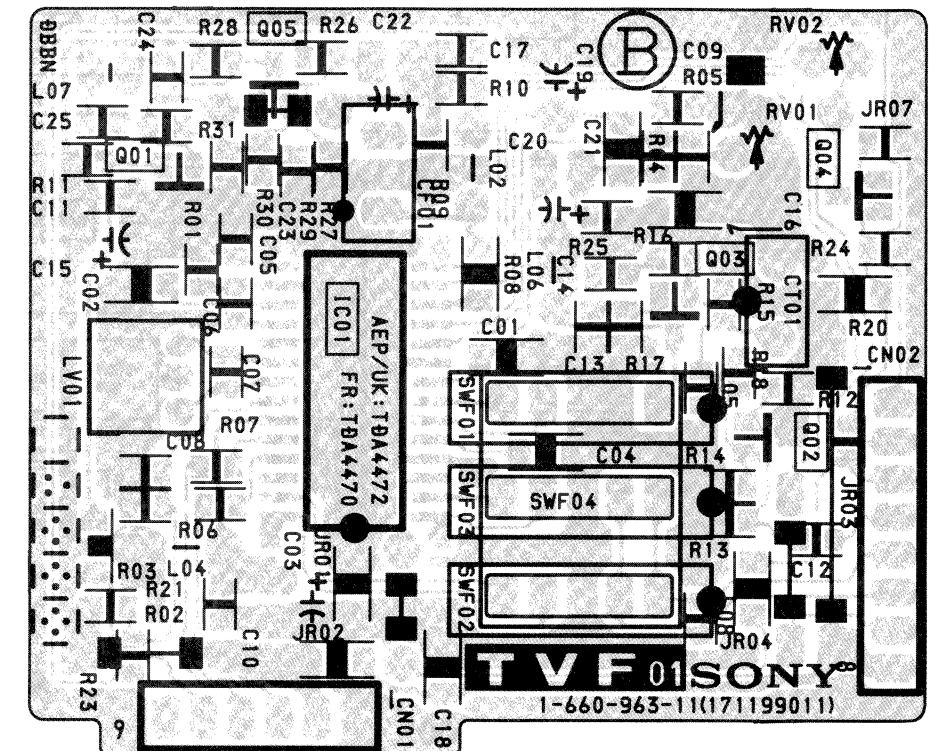
B-#TVF-01<FR>-IF.

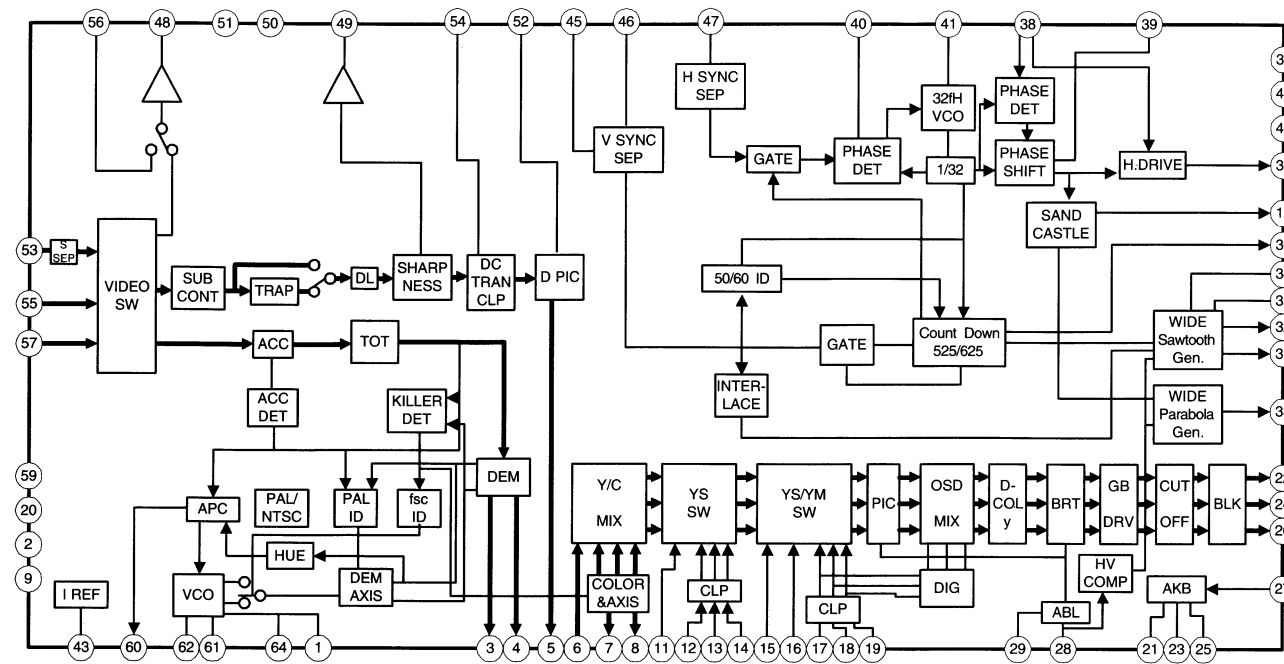
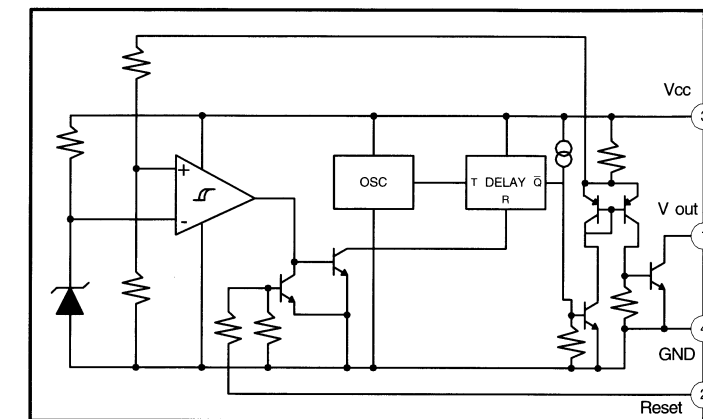
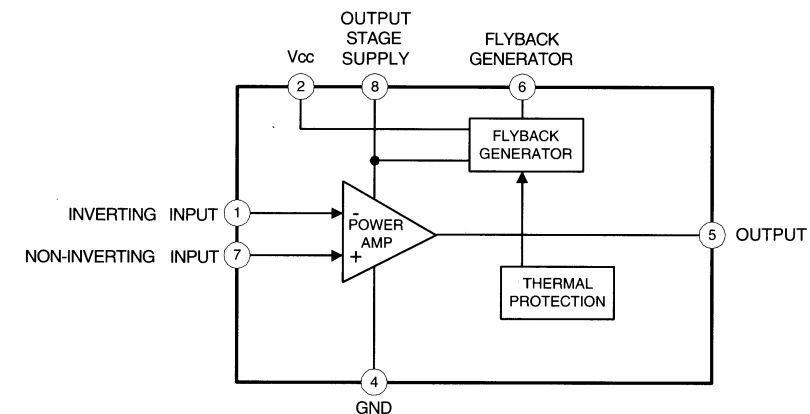
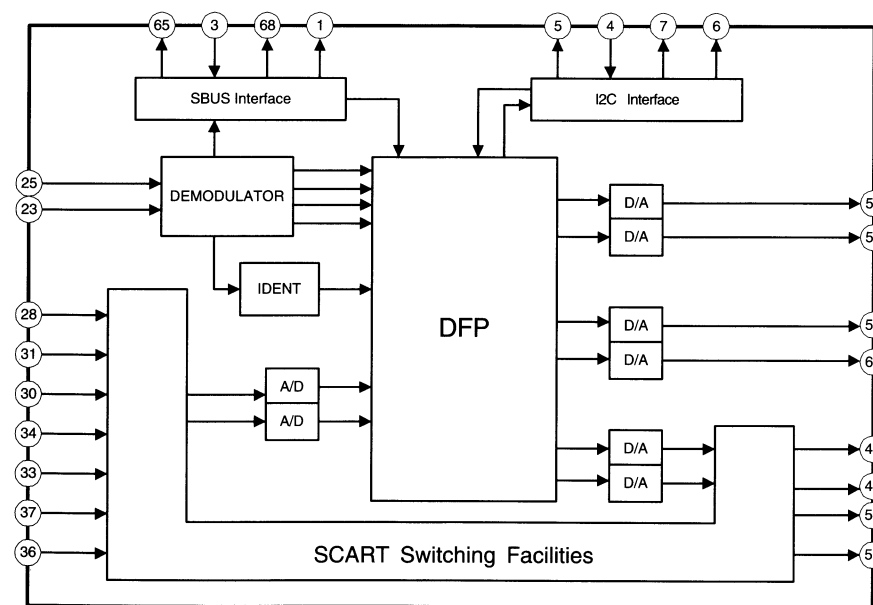
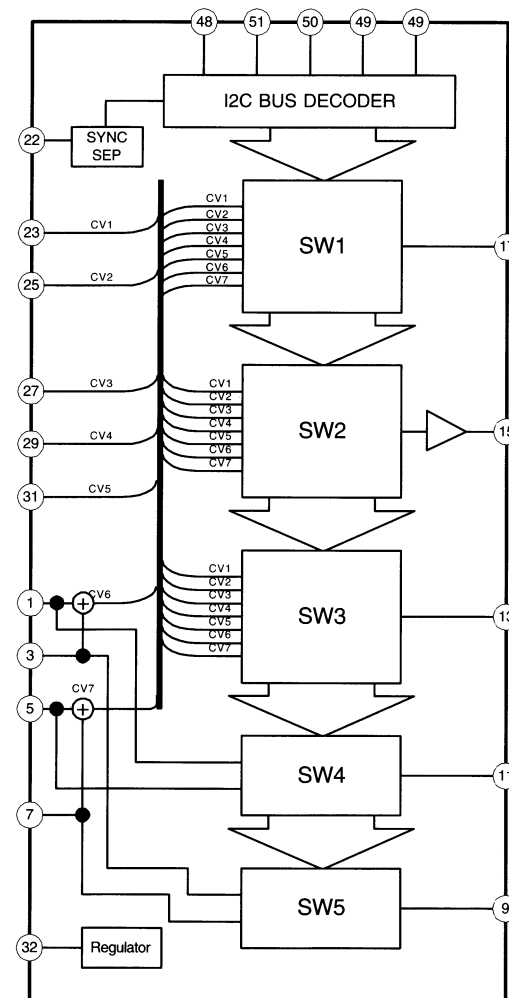
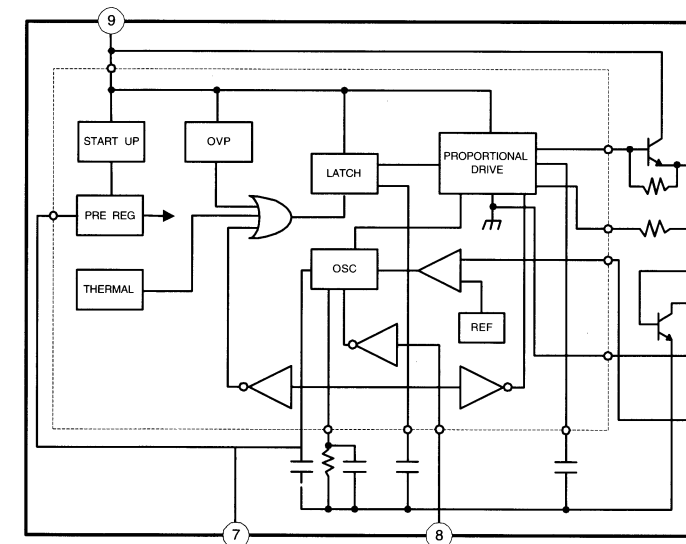
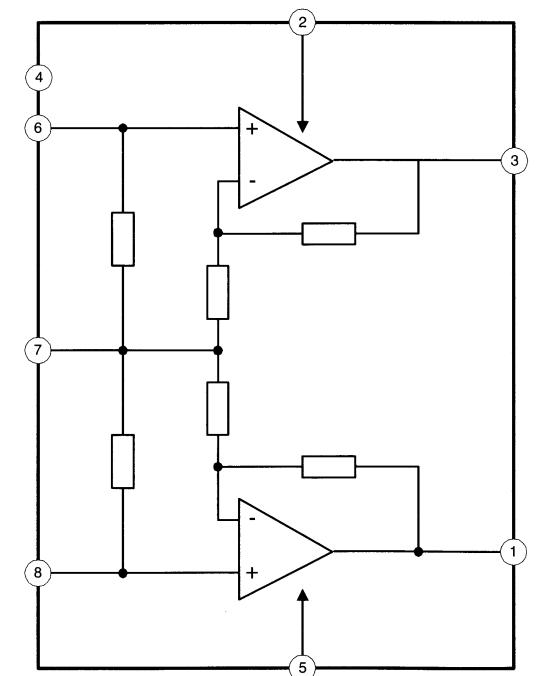


IF

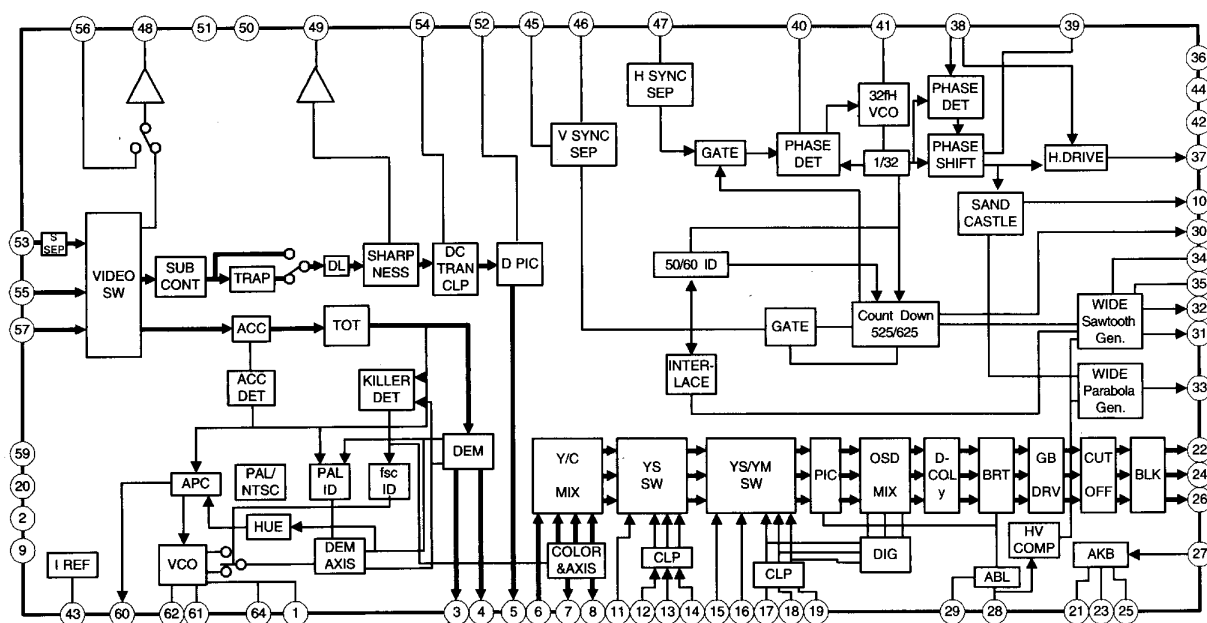
[VIF, SIF]

IF Board



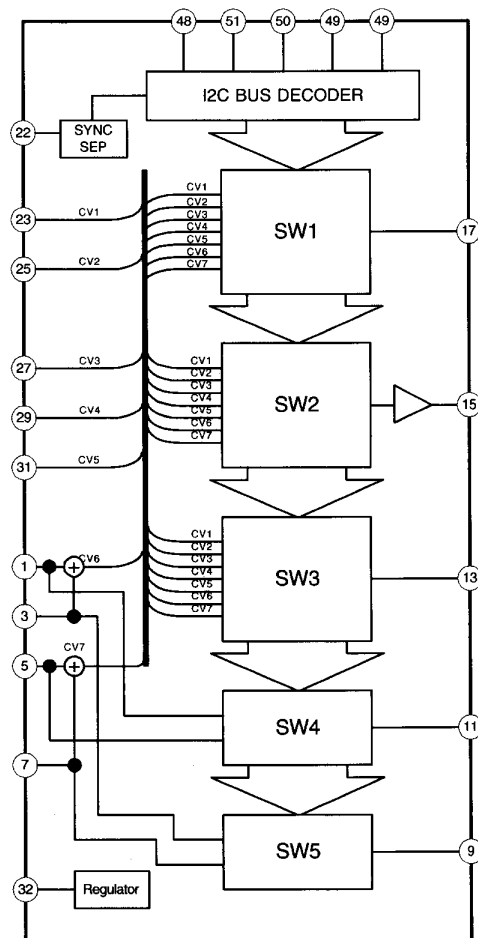
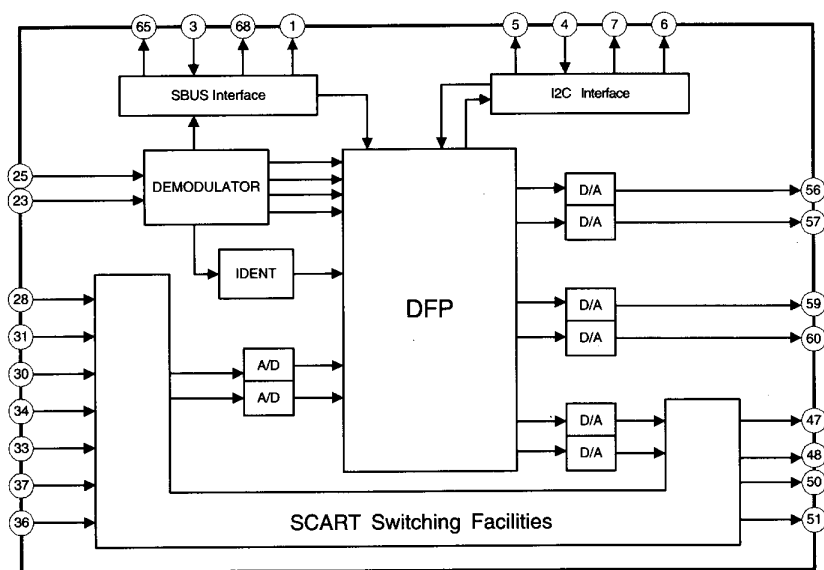
A BOARD IC301 CXA2000Q-TL**A BOARD IC4 PST593C****D BOARD IC500 STV9379****A BOARD IC202 MSP3410/MSP3400****A BOARD IC201 CXA2040Q****D BOARD IC600 STR-S6708****D BOARD IC1200 TDA7264**

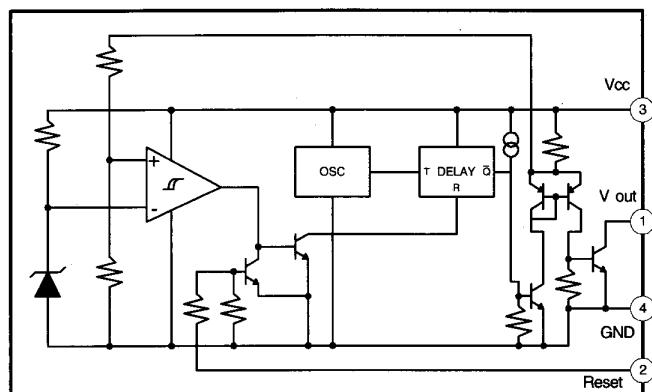
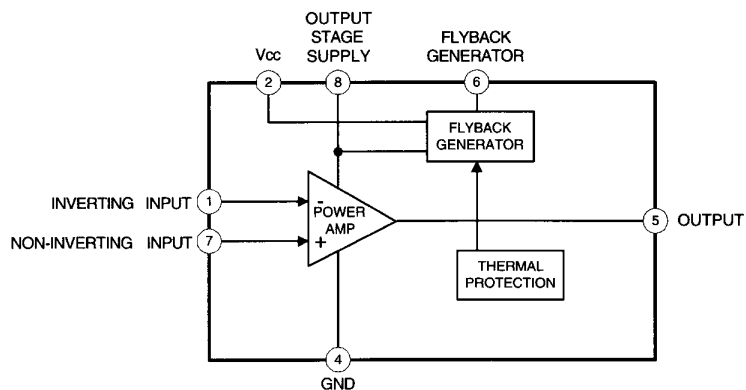
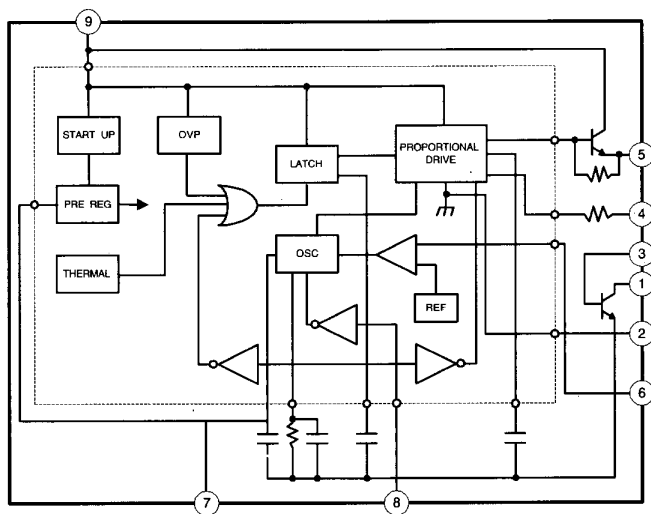
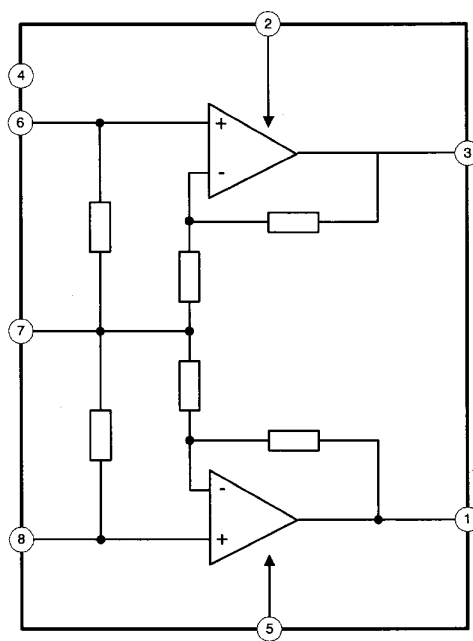
A BOARD IC301 CXA2000Q-TL



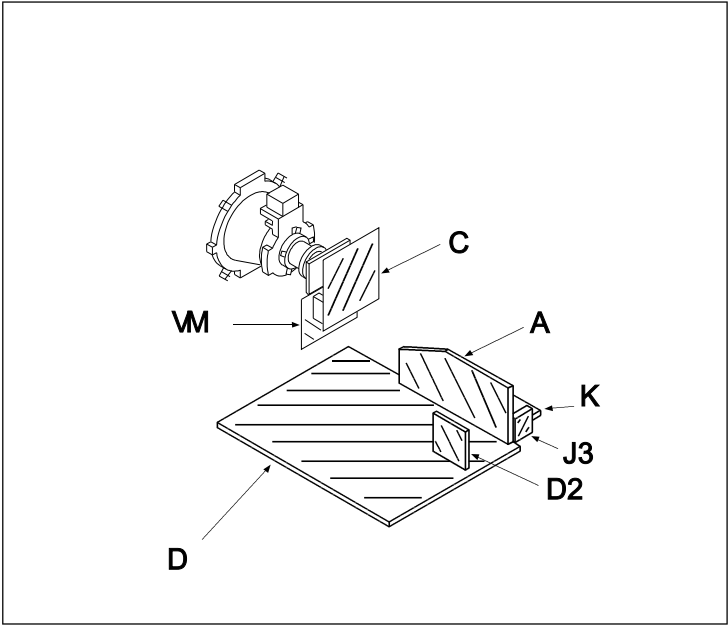
A BOARD IC201 CXA2040Q

A BOARD IC202 MSP3410B-PS/MSP3400C-P5



A BOARD IC4 PST593C-MMP-4P**D BOARD IC500 STV9379****D BOARD IC600 STR-S6709****D BOARD IC1200 TDA7264**

5-2. CIRCUIT BOARDS LOCATION










5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS


Note :

- All capacitors are in μF unless otherwise noted. pF : $\mu\mu\text{F}$ 50WV or less are not indicated except for electrolytic and tantalums.
- All resistors are in ohms.
 $k = 1000$, $M = 1000K$
- Indication of resistance, which does not have one for rating electrical power, is as follows.


Pitch : 5 mm
Rating electrical power $\frac{1}{4}$ W



-  : nonflammable resistor.
-  : internal component.
-  : panel designation, or adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
-  : earth - ground.
-  : earth - chassis.
-  : no mounted.

Note : The components identified by shading and marked  are critical for safety. Replace only with the part number specified.

Note : Les composants identifiés par une trame et une marque  sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

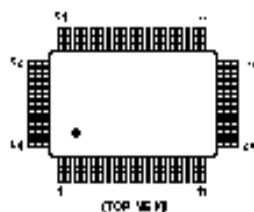
Reference information

RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: RW	NONFLAMMABLE WIREWOUND
COIL	: 	ADJUSTABLE RESISTOR
	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

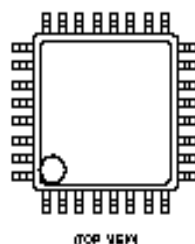
- Readings are taken with a colour-bar signal input.
- Readings are taken with 10M Ω digital multimeter.
- Voltages are dc with respect to ground unless otherwise noted.
- Voltage variations may be noted due to normal production tolerances.
- All voltages are in V.
- Circled numbers are waveform references.
-  : B+ bus.
-  : signal path. (RF)

5-4 SEMICONDUCTORS

CX A2000Q-TL



CX A2040Q-T4

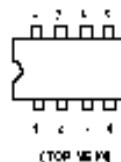


IS474

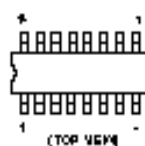
L4941B-V NIM78M09FA
 LME940CT-50 TEA7605
 LME940T-90 μ PC2405HF
 MCT7809CT



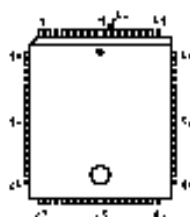
LM393P
 M2216P
 TD A6822M
 μ PC393C



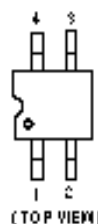
MC 14032BDP2



MSP3400C-PG
 MSP3410B-PG-F7-T
 SDA3273CP-G BG



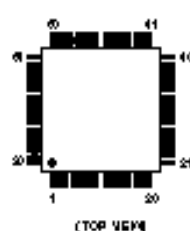
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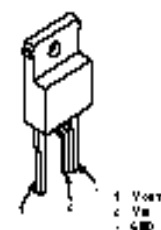
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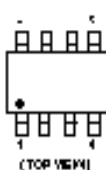
SDA3250MC5-G BG



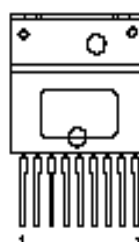
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ST24 E32M5TR



STR-S6709



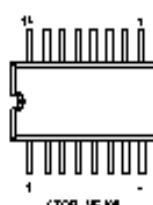
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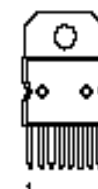
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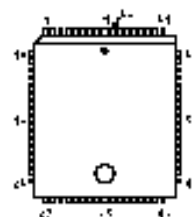
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TD A8395T



TM627PC020A-15 RML



BF871-127



BF421L-AMMO 2SA933S
 JA101TP-Q 2SA1091-O
 JC501-Q-AMMO 2SC3502-F
 2SA733-K 2SC2808STP-R
 2SA933AG 2SC3601-E



DTA144ES
 DTC114ES
 DTC143TS
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 2SC1740G-RT



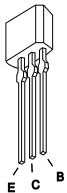
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 2SA1162-G
 2SC2412K



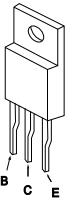
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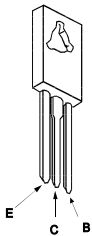
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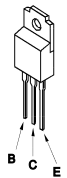
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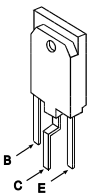
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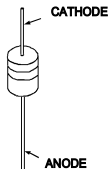
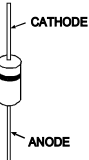
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2SC4927-01

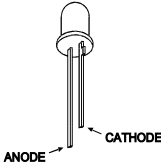
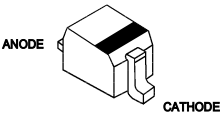


AU-01Z-V1	GP08D	MTZJ-T-77-9.1A	RD3.9ESB2
EG-1Z-V1	RGP02	MTZJ-3.6A	RD5.1ESB2
EGP20G	RGP10GPKG23	MTZJ-3.9B	RD5.6ESB2
EL1Z	RGP15GPKG23	MTZJ-5.1B	RD6.2ESB2
EM1-V1	RU3YX-LF-C4	MTZJ-5.6B	RD6.8ESB2
EU-1-V1	RU3YX-V1	MTZJ-6.2B	RD7.5ESB2
EU2A	RU4AM-T3	MTZJ-6.8B	RD10ESB2
EU2-V1	RU4DS	MTZJ-7.5C	RD39ES-B2
FML-G12S		MTZJ-10	1SS133T-77
		MTZJ-39C	

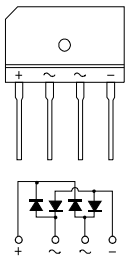


BAS216	MA8330
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DTZ9.1	UDZ-TE-17-5.6B
DTZ33B	UDZ-TE-17-9.1B

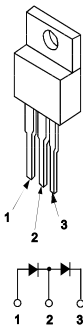
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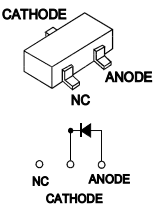
D4SB60L



FMS-3FU



MA3030H(TX)





SECTION 6

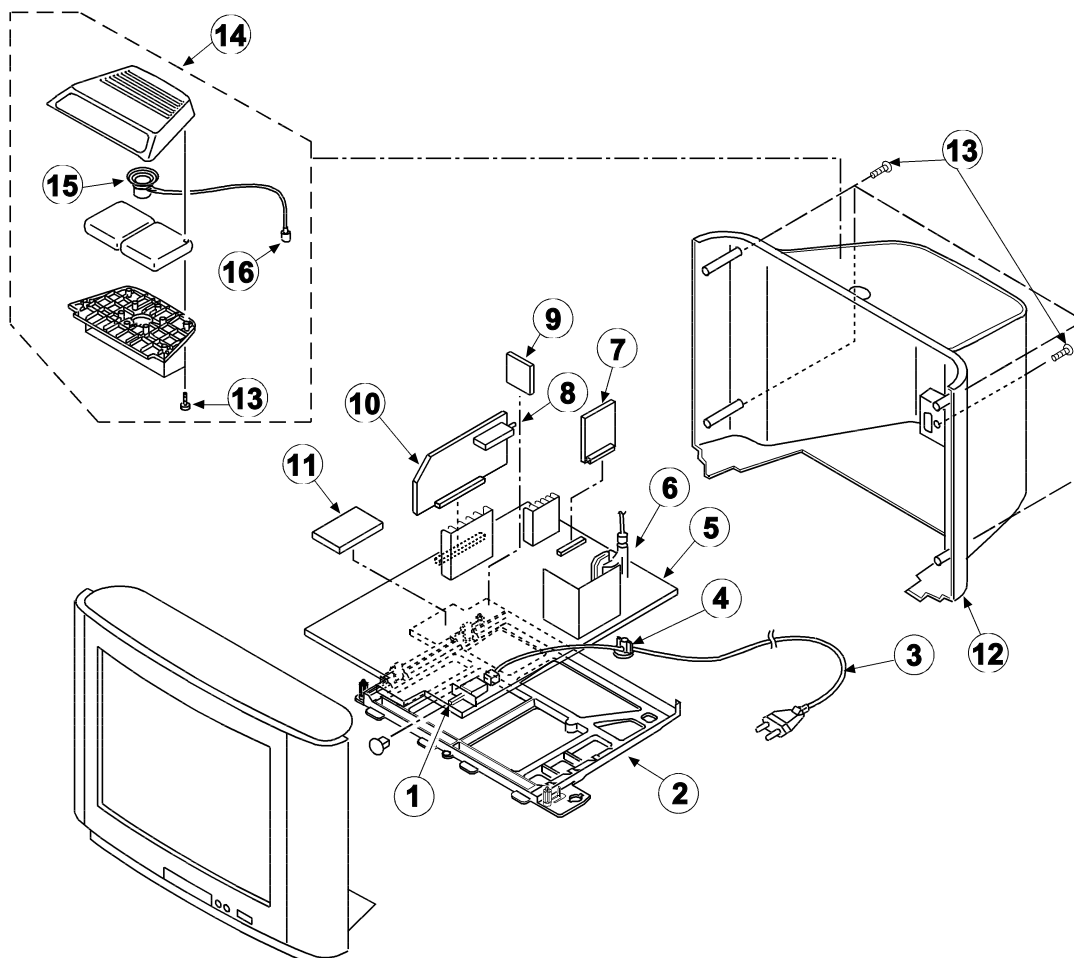
EXPLODED VIEWS






NOTE :

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remarks column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

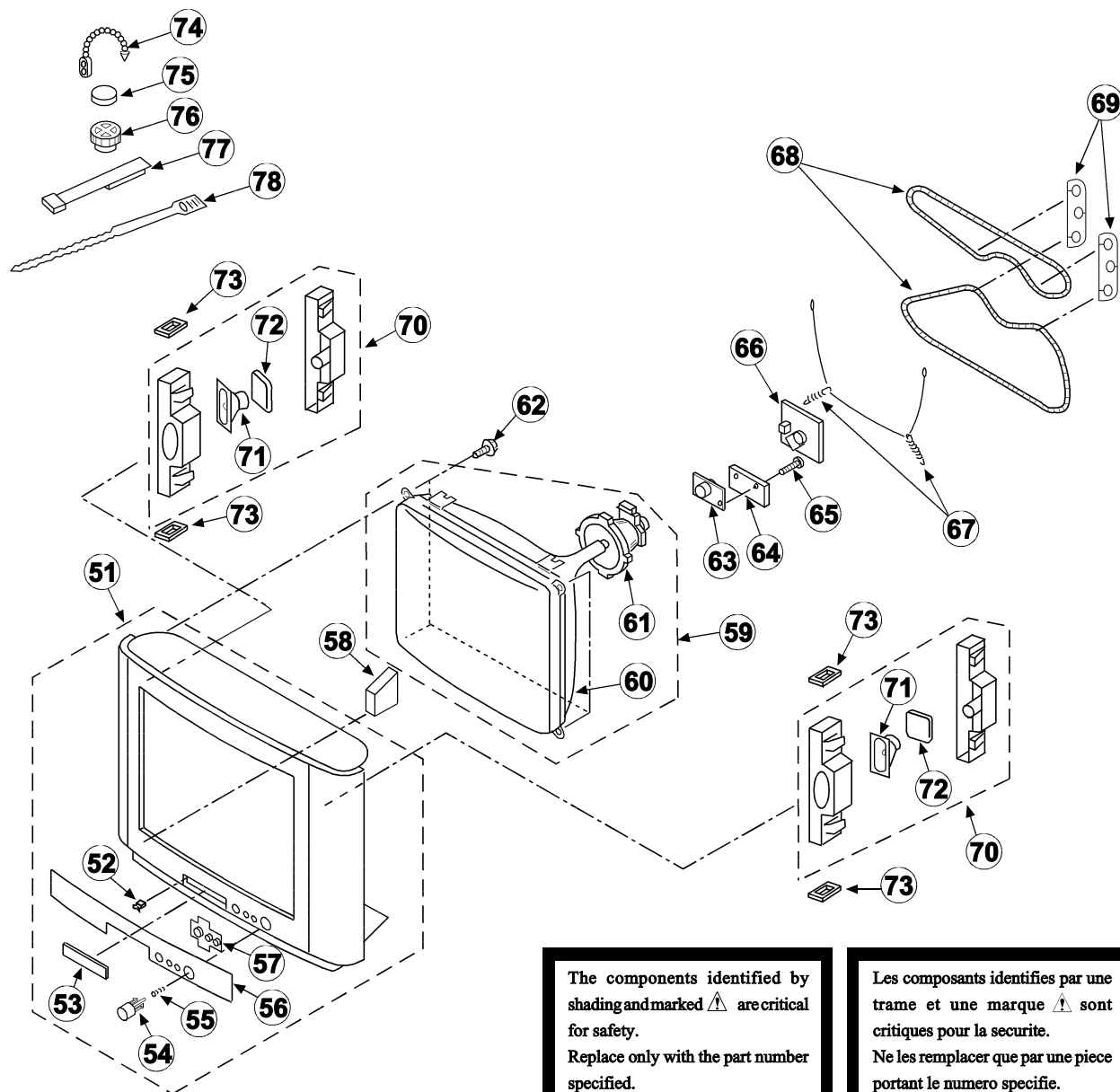
The components identified by shading and marked  are critical for safety.
Replace only with the part number specified.

Les composants identifiés par une trame et une marque  sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

6-1. CHASSIS

REF NO	PART NO	DESCRIPTION	REMARK	REF NO	PART NO	DESCRIPTION	REMARK
1	 1-571-433-21	SWITCH, PUSH (AC POWER)		10	*A-1632-508-A	A BOARD, COMPLETE (KV-29C2A)	
2	*4-203-526-01	BRACKET, MAIN			*A-1632-510-A	A BOARD, COMPLETE (KV-29C2B)	
3	 1-751-680-11	CORD, POWER (WITH NOISE FILTER) 2.5A/250V (KV-29C2A/29C2B/29C2D/ 29C2E)			*A-1632-446-A	A BOARD, COMPLETE (KV-29C2D)	
	 1-690-270-21	CORD, POWER (WITH CONNECTOR) 2.5A/250V (KV-29C2K/29C2R)			*A-1632-509-A	A BOARD, COMPLETE (KV-29C2E)	
4	 *4-202-531-01	AC CORD LOCK (SC)			*A-1632-511-A	A BOARD, COMPLETE (KV-29C2K)	
5	*A-1642-174 -A	D BOARD, COMPLETE			*A-1632-512-A	A BOARD, COMPLETE (KV-29C2R)	
6	 1-453-169-11	TRANSFORMER ASSY, FLYBACK (UX-1604A2)		11	*A-1649-017-A	K BOARD, COMPLETE	
7	*A-1640-250-A	D2 BOARD, COMPLETE		12	4-202-993-11	COVER REAR	
8	1-693-338-11	TUNER/VIF (AEP) (KV-29C2A/29C2D/29C2E/29C2K/29C2R)		13	4-039-358-01	SCREW (4x16), (+) BV TAPPING	
	1-693-340-11	TUNER/VIF (FR) (KV-29C2B)		14	A-1678-054-A	BOX ASSY, WOOFER	13,15,16
9	*A-1651-087-A	J3 BOARD, COMPLETE		15	1-544-767-11	SPEAKER (13CM)	
				16	1-696-554-11	CABLE, SPEAKER (WITH PLUG)	

6-2. PICTURE TUBE



The components identified by shading and marked ▲ are critical for safety. Replace only with the part number specified.

Les composants identifiés par une trame et une marque ▲ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

REF NO	PART NO	DESCRIPTION	REMARK	REF NO	PART NO	DESCRIPTION	REMARK
51	X-4200-270-1	BEZNET ASSY(S) (KV-29C2A/29C2D/29C2K/29C2R)	52-60	63	▲ 8-453-005-11	NECK ASSY (NA297-M)	
	X-4200-272-1	BEZNET ASSY(S-N) (KV-29C2B/29C2E)		64	*A-1644-070-A	VM BOARD, COMPLETE	
52	4-392-036-01	CATCHER, PUSH		65	4-039-356-01	SCREW (3X12), (+) BV TAPPING	
53	4-203-013-01	DOOR (PAINTED) (S)		66	*A-1638-085-A	C BOARD, COMPLETE	
54	4-202-992-01	BUTTON, POWER		67	4-369-318-51	SPRING, TENSION	
55	4-202-964-01	SPRING		68	▲ 1-406-807-11	COIL, DEGAUSSING	
56	X-4200-271-A	PANEL ASSY(S) (KV-29C2A/29C2D/29C2K/29C2R)		69	4-202-749-01	HOLDER, D.G.C. (29"/32")	
	X-4200-273-A	PANEL ASSY(S) (KV-29C2B/29C2E)		70	*A-1678-087-A	BOX ASSY	72-73
57	4-203-524-01	WINDOW ORNAMENTAL		71	1-504-146-11	SPEAKER (5X11CM)	
58	*4-203-098-01	SUPPORTER, CRT		72	4-200-999-01	STOPPER	
59	▲ 8-733-856-51	ITC		73	*4-202-988-01	CUSHION, BOX	
60	▲ 8-733-856-05	PICTURE TUBE (SD-269) (M68LCT60X)		74	4-308-870-00	CLIP, LEAD WIRE	
61	▲ 8-451-467-31	DEFLECTION YOKE (Y29GXA2-B2)		75	1-452-032-00	MAGNET, DISK; 10MM Ø	
62	4-203-043-01	SCREW (PT)		76	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM Ø	
				77	X-4387-214-1	PERMALLOY ASSY, CORRECTION	
				78	3-701-007-00	BAND, BINDING	

SECTION 7

ELECTRICAL PARTS LIST

The components identified by shading and marked Δ are critical for safety.
Replace only with the part number specified.

Les composants identifiés par une trame et une marque Δ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS

- All resistors are in ohms
- F : nonflammable

When indicating parts by reference number, please include the board name.

CAPACITORS

MF : mF, PF : mmF

COILS

MMH : mH, μ H : mH

A

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
	*A-1632-508-A	A BOARD, COMPLETE (KV-29C2A) *****		C121	1-163-247-11	CERAMIC CHIP 68PF	5% 50V
	*A-1632-510-A	A BOARD, COMPLETE (KV-29C2B) *****		C122	1-163-137-00	CERAMIC CHIP 680PF	5% 50V
	*A-1632-446-A	A BOARD, COMPLETE (KV-29C2D) *****		C123	1-163-247-11	CERAMIC CHIP 68PF	5% 50V
	*A-1632-509-A	A BOARD, COMPLETE (KV-29C2E) *****		C124	1-137-399-11	FILM 0.1MF	5% 50V
	*A-1632-511-A	A BOARD, COMPLETE (KV-29C2K) *****		C201	1-163-139-00	CERAMIC CHIP 820PF	5% 50V
	*A-1632-512-A	A BOARD, COMPLETE (KV-29C2R) *****		C202	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
	1-750-797-11	SOCKET, PLCC		C203	1-126-933-11	ELECT 100MF	20% 16V
	< CAPACITOR >			C204	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C1	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C205	1-126-965-11	ELECT 22MF	20% 50V
C2	1-126-965-11	ELECT 22MF	20% 50V	C206	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C3	1-163-104-00	CERAMIC CHIP 30PF	5% 50V	C207	1-164-505-11	CERAMIC CHIP 2.2MF	16V
C4	1-163-104-00	CERAMIC CHIP 30PF	5% 50V	C208	1-164-505-11	CERAMIC CHIP 2.2MF	16V
C8	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C209	1-164-505-11	CERAMIC CHIP 2.2MF	16V
C10	1-163-243-11	CERAMIC CHIP 47PF	5% 50V	C210	1-216-295-00	METAL GLAZE 0 5% 1/10W	
C11	1-163-243-11	CERAMIC CHIP 47PF	5% 50V	C211	1-164-505-11	CERAMIC CHIP 2.2MF	16V
C14	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C212	1-164-346-11	CERAMIC CHIP 1MF	16V
C15	1-163-133-00	CERAMIC CHIP 470PF	5% 50V	C213	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
C18	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C214	1-164-346-11	CERAMIC CHIP 1MF	16V
C19	1-163-989-11	CERAMIC CHIP 0.033MF	10% 25V	C215	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
C20	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C216	1-126-967-11	ELECT 47MF	20% 16V
C21	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C217	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C22	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	C218	1-126-967-11	ELECT 47MF	20% 16V
C43	1-163-121-00	CERAMIC CHIP 150PF	5% 50V	C219	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C45	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C220	1-164-505-11	CERAMIC CHIP 2.2MF	16V
C80	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	C221	1-164-505-11	CERAMIC CHIP 2.2MF	16V
C81	1-164-005-11	CERAMIC CHIP 0.47MF	25V	C222	1-164-346-11	CERAMIC CHIP 1MF	16V
C82	1-163-037-11	CERAMIC CHIP 0.022MF	10% 50V	C223	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
C90	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C224	1-164-346-11	CERAMIC CHIP 1MF	16V
C101	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C225	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
C102	1-126-934-11	ELECT 220MF	20% 16V	C226	1-126-967-11	ELECT 47MF	20% 16V
C103	1-126-965-11	ELECT 22MF	20% 50V	C227	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C104	1-163-117-00	CERAMIC CHIP 100PF	5% 50V (KV-29C2B)	C228	1-126-967-11	ELECT 47MF	20% 16V
C110	1-126-967-11	ELECT 47MF	20% 16V	C229	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C112	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V	C230	1-216-295-00	METAL GLAZE 0 5% 1/10W	
C113	1-126-967-11	ELECT 47MF	20% 16V	C231	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C115	1-102-112-00	CERAMIC 330PF	10% 50V (KV-29C2B)	C232	1-126-967-11	ELECT 47MF	20% 16V
C120	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	C251	1-163-087-00	CERAMIC CHIP 4PF	0.25PF 50V
				C252	1-163-087-00	CERAMIC CHIP 4PF	0.25PF 50V
				C253	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
				C254	1-163-109-00	CERAMIC CHIP 47PF	5% 50V
				C255	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
				C256	1-163-038-00	CERAMIC CHIP 0.1MF	25V
				C257	1-126-965-11	ELECT 22MF	20% 50V
				C258	1-126-964-11	ELECT 10MF	20% 50V
				C259	1-164-336-11	CERAMIC CHIP 0.33MF	25V

A

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C260	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C340	1-126-933-11	ELECT 100MF	20% 16V
C261	1-163-133-00	CERAMIC CHIP 470PF	5% 50V	C341	1-164-005-11	CERAMIC CHIP 0.47MF	25V
C262	1-163-133-00	CERAMIC CHIP 470PF	5% 50V	C342	1-164-346-11	CERAMIC CHIP 1MF	16V
C263	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C343	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
C264	1-126-962-11	ELECT 3.3MF	20% 50V	C344	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
C265	1-126-964-11	ELECT 10MF	20% 50V	C347	1-164-005-11	CERAMIC CHIP 0.47MF	25V
C266	1-126-964-11	ELECT 10MF	20% 50V	C348	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C267	1-126-965-11	ELECT 22MF	20% 50V	C350	1-126-964-11	ELECT 10MF	20% 50V
C268	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C351	1-164-505-11	CERAMIC CHIP 2.2MF	16V
C269	1-163-131-00	CERAMIC CHIP 390PF	5% 50V	C352	1-164-005-11	CERAMIC CHIP 0.47MF	25V
C270	1-163-131-00	CERAMIC CHIP 390PF	5% 50V	C353	1-164-505-11	CERAMIC CHIP 2.2MF	16V
C271	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V	C354	1-164-005-11	CERAMIC CHIP 0.47MF	25V
C272	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V	C355	1-126-965-11	ELECT 22MF	20% 50V
C273	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V	C356	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C274	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V	C357	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
C275	1-164-346-11	CERAMIC CHIP 1MF	16V	C358	1-164-005-11	CERAMIC CHIP 0.47MF	25V
C276	1-164-346-11	CERAMIC CHIP 1MF	16V	C359	1-163-231-11	CERAMIC CHIP 15PF	5% 50V
C277	1-164-346-11	CERAMIC CHIP 1MF	16V	C360	1-163-231-11	CERAMIC CHIP 15PF	5% 50V
C278	1-164-346-11	CERAMIC CHIP 1MF	16V	C370	1-164-505-11	CERAMIC CHIP 2.2MF	16V
C279	1-126-965-11	ELECT 22MF	20% 50V	(KV-29C2B/29C2D/29C2E/29C2K/29C2R)			
C280	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C371	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C281	1-126-965-11	ELECT 22MF	20% 50V	C372	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C282	1-163-038-00	CERAMIC CHIP 0.1MF	25V	(KV-29C2B/29C2D/29C2E/29C2K/29C2R)			
C300	1-163-109-00	CERAMIC CHIP 47PF	5% 50V	C373	1-164-489-11	CERAMIC CHIP 0.22MF	10% 16V
C301	1-163-038-00	CERAMIC CHIP 0.1MF	25V	(KV-29C2B/29C2D/29C2E/29C2K/29C2R)			
C302	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V	C1001	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
C303	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V	C1002	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
C304	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C1010	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C305	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C1013	1-126-965-11	ELECT 22MF	20% 50V
C306	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C1014	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C307	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C1015	1-164-489-11	CERAMIC CHIP 0.22MF	10% 16V
C308	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C1020	1-163-101-00	CERAMIC CHIP 22PF	5% 50V
C309	1-164-346-11	CERAMIC CHIP 1MF	16V	< FILTER >			
C310	1-164-346-11	CERAMIC CHIP 1MF	16V	CF120	1-409-327-00	TRAP, CERAMIC (6.5MHz) (KV-29C2B)	
C311	1-164-346-11	CERAMIC CHIP 1MF	16V	< CONNECTOR >			
C312	1-164-505-11	CERAMIC CHIP 2.2MF	16V	CW1	1-695-302-11	CONNECTOR, BOARD TO BOARD 50P	
C313	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V	CW2	*1-568-880-51	PLUG, CONNECTOR 5P	
C315	1-216-295-00	METAL GLAZE 0	5% 1.10W	CW201	1-766-296-11	CONNECTOR, DUAL SCART	
C317	1-163-038-00	CERAMIC CHIP 0.1MF	25V	CW301	*1-568-882-51	PIN, CONNECTOR 7P	
C319	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V	< DIODE >			
C320	1-126-965-11	ELECT 22MF	20% 50V	D2	8-719-988-62	DIODE 1SS355	
C321	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	D10	8-719-158-15	DIODE RD5.6S-B	
C322	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V	D11	8-719-158-15	DIODE RD5.6S-B	
C323	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V	D12	8-719-158-15	DIODE RD5.6S-B	
C324	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V	D101	8-719-977-81	DIODE DTZ33B	
C325	1-164-346-11	CERAMIC CHIP 1MF	16V	D201	8-719-977-22	DIODE DTZ9.1	
C326	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V	D202	8-719-977-22	DIODE DTZ9.1	
C327	1-137-374-11	FILM 0.047MF	5% 50V	D203	8-719-977-22	DIODE DTZ9.1	
C328	1-126-964-11	ELECT 10MF	20% 50V	D204	8-719-977-22	DIODE DTZ9.1	
C329	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	D205	8-719-977-22	DIODE DTZ9.1	
C330	1-130-777-00	FILM 0.1MF	5% 63V	D206	8-719-977-22	DIODE DTZ9.1	
C331	1-137-581-11	FILM 0.1MF	5% 100V	D207	8-719-977-22	DIODE DTZ9.1	
C332	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	D208	8-719-977-22	DIODE DTZ9.1	
C333	1-126-933-11	ELECT 100MF	20% 16V	D209	8-719-977-22	DIODE DTZ9.1	
C334	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	D210	8-719-977-22	DIODE DTZ9.1	
C335	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	D211	8-719-977-22	DIODE DTZ9.1	
C336	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	D212	8-719-977-22	DIODE DTZ9.1	
C337	1-164-009-11	CERAMIC CHIP 0.001MF	10% 50V				
C338	1-164-346-11	CERAMIC CHIP 1MF	16V				
C339	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V				



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
D213	8-719-977-22	DIODE DTZ9.1		Q113	8-729-216-22	TRANSISTOR 2SA1162-G	
D214	8-719-977-22	DIODE DTZ9.1		Q114	8-729-216-22	TRANSISTOR 2SA1162-G	
D215	8-719-977-22	DIODE DTZ9.1		Q120	8-729-920-74	TRANSISTOR 2SC2412K-QR	
D216	8-719-158-15	DIODE RD5.6S-B		Q121	8-729-920-74	TRANSISTOR 2SC2412K-QR (KV-29C2B)	
D217	8-719-158-15	DIODE RD5.6S-B		Q122	8-729-920-74	TRANSISTOR 2SC2412K-QR	
D218	8-719-158-15	DIODE RD5.6S-B		Q124	8-729-920-74	TRANSISTOR 2SC2412K-QR (KV-29C2B)	
D220	8-719-988-62	DIODE 1S8355		Q130	8-729-216-22	TRANSISTOR 2SA1162-G (KV-29C2B)	
D221	8-719-988-62	DIODE 1S8355		Q201	8-729-920-74	TRANSISTOR 2SC2412K-QR	
D222	8-719-977-22	DIODE DTZ9.1		Q202	8-729-920-74	TRANSISTOR 2SC2412K-QR	
D223	8-719-977-22	DIODE DTZ9.1		Q203	8-729-920-74	TRANSISTOR 2SC2412K-QR	
D224	8-719-977-22	DIODE DTZ9.1		Q204	8-729-920-74	TRANSISTOR 2SC2412K-QR	
D225	8-719-977-22	DIODE DTZ9.1		Q205	8-729-901-01	TRANSISTOR DTC144EK	
D226	8-719-977-22	DIODE DTZ9.1		Q206	8-729-216-22	TRANSISTOR 2SA1162-G	
D227	8-719-977-13	DIODE DTZ6.8C		Q207	8-729-216-22	TRANSISTOR 2SA1162-G	
D251	8-719-047-16	DIODE BAS216		Q300	8-729-901-01	TRANSISTOR DTC144EK	
D320	8-719-977-22	DIODE DTZ9.1		Q304	8-729-920-74	TRANSISTOR 2SC2412K-QR	
D370	8-719-047-16	DIODE BAS216	(KV-29C2B/29C2D/29C2E/29C2K/29C2R)	Q305	8-729-920-74	TRANSISTOR 2SC2412K-QR	
				Q306	8-729-901-01	TRANSISTOR DTC144EK	
D1010	8-719-036-58	DIODE MA3030-H(TX)		Q330	8-729-216-22	TRANSISTOR 2SA1162-G	
	< LINE FILTER >			Q331	8-729-920-74	TRANSISTOR 2SC2412K-QR	
FL101	1-236-071-11	ENCAPSULATED COMPONENT		Q332	8-729-920-74	TRANSISTOR 2SC2412K-QR	
FL201	1-236-071-11	ENCAPSULATED COMPONENT		Q1001	8-729-901-01	TRANSISTOR DTC144EK	
FL202	1-236-071-11	ENCAPSULATED COMPONENT		Q1002	8-729-216-22	TRANSISTOR 2SA1162-G	
FL203	1-236-071-11	ENCAPSULATED COMPONENT			< RESISTOR >		
FL1001	1-236-071-11	ENCAPSULATED COMPONENT		JR5	1-216-295-00	METAL GLAZE 0 5% 1/10W	
	< IC >			JR6	1-216-295-00	METAL GLAZE 0 5% 1/10W	
IC1	8-759-376-75	IC SDA5250M-C5-GEG		JR101	1-216-295-00	METAL GLAZE 0 5% 1/10W	
IC2	8-759-334-20	IC ST24E32M6TR		JR201	1-216-295-00	METAL GLAZE 0 5% 1/10W	
IC3	8-759-353-82	IC TMS27PC020A-15FML		JR204	1-216-295-00	METAL GLAZE 0 5% 1/10W	
IC4	8-759-394-57	IC PST593C-MMP-4P		JR205	1-216-295-00	METAL GLAZE 0 5% 1/10W	
IC201	8-752-076-06	IC CXA2040Q-T4		JR206	1-216-295-00	METAL GLAZE 0 5% 1/10W	
				JR207	1-216-295-00	METAL GLAZE 0 5% 1/10W	
IC202	8-759-376-80	IC MSP3410B-PS-F7-T (KV-29C2B/29C2E)		JR304	1-216-296-91	METAL GLAZE 0 5% 1/8W	
	8-759-376-56	IC MSP3400C-PS-C6-T	(KV-29C2A/29C2D/29C2K/29C2R)	JR304	1-216-296-91	METAL GLAZE 0 5% 1/8W	
IC203	8-759-385-76	IC MC14052 BDR2		R1	1-216-295-00	METAL GLAZE 0 5% 1/10W	
IC301	8-752-076-09	IC CXA2000Q-TL		R2	1-216-025-00	METAL GLAZE 100 5% 1/10W	
				R3	1-216-025-00	METAL GLAZE 100 5% 1/10W	
IC302	8-759-288-85	IC TDA4665T-T		R4	1-216-013-00	METAL GLAZE 33 5% 1/10W	
IC303	8-759-251-56	IC TDA8395T	(KV-29C2B/29C2D/29C2E/29C2K/29C2R)	R5	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
IC1001	8-759-376-76	IC SDA5273CP-GEG		R7	1-216-041-00	METAL GLAZE 470 5% 1/10W	
	< COIL >			R8	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
L10	1-410-379-31	INDUCTOR CHIP 6.8UH		R9	1-216-041-00	METAL GLAZE 470 5% 1/10W	
L102	1-408-406-00	INDUCTOR 5.6UH (KV-29C2B)		R18	1-216-025-00	METAL GLAZE 100 5% 1/10W	
L111	1-410-993-11	INDUCTOR CHIP 1UH		R19	1-216-025-00	METAL GLAZE 100 5% 1/10W	
L120	1-408-408-00	INDUCTOR 8.2UH		R20	1-216-025-00	METAL GLAZE 100 5% 1/10W	
L121	1-408-397-00	INDUCTOR 1UH		R21	1-216-025-00	METAL GLAZE 100 5% 1/10W	
				R24	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
L122	1-408-408-00	INDUCTOR 8.2UH		R25	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
L300	1-408-607-31	INDUCTOR 22UH		R28	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
	< TRANSISTOR >			R29	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
Q1	8-729-920-74	TRANSISTOR 2SC2412K-QR		R30	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
Q4	8-729-920-74	TRANSISTOR 2SC2412K-QR		R31	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
Q80	8-729-920-74	TRANSISTOR 2SC2412K-QR		R32	1-216-025-00	METAL GLAZE 100 5% 1/10W	
Q81	8-729-216-22	TRANSISTOR 2SA1162-G		R33	1-216-025-00	METAL GLAZE 100 5% 1/10W	
Q110	8-729-920-74	TRANSISTOR 2SC2412K-QR		R34	1-216-025-00	METAL GLAZE 100 5% 1/10W	
				R35	1-216-025-00	METAL GLAZE 100 5% 1/10W	
Q111	8-729-216-22	TRANSISTOR 2SA1162-G		R36	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
Q112	8-729-920-74	TRANSISTOR 2SC2412K-QR		R37	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
				R38	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	


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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R39	1-216-073-00	METAL GLAZE 10K 5%	1/10W	R118	1-216-071-00	METAL GLAZE 8.2K 5%	1/10W
R40	1-216-067-00	METAL GLAZE 5.6K 5%	1/10W	R119	1-216-033-00	METAL GLAZE 220 5%	1/10W
R42	1-216-069-00	METAL GLAZE 6.8K 5%	1/10W	R120	1-216-069-00	METAL GLAZE 6.8K 5%	1/10W
R44	1-216-069-00	METAL GLAZE 6.8K 5%	1/10W	R121	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R46	1-216-095-00	METAL GLAZE 82K 5%	1/10W	R122	1-216-041-00	METAL GLAZE 470 5%	1/10W
R47	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W	R123	1-216-031-00	METAL GLAZE 180 5%	1/10W
R48	1-216-121-91	METAL GLAZE 1M 5%	1/10W	R124	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R49	1-216-025-00	METAL GLAZE 100 5%	1/10W	R125	1-216-081-00	METAL GLAZE 22K 5%	1/10W
R54	1-216-025-00	METAL GLAZE 100 5%	1/10W	R126	1-216-025-00	METAL GLAZE 100 5%	1/10W (KV-29C2B)
R58	1-216-063-91	METAL GLAZE 3.9K 5%	1/10W	R127	1-216-081-00	METAL GLAZE 22K 5%	1/10W
R59	1-216-025-00	METAL GLAZE 100 5%	1/10W	R128	1-216-035-00	METAL GLAZE 270 5%	1/10W
R60	1-216-025-00	METAL GLAZE 100 5%	1/10W	R129	1-216-037-00	METAL GLAZE 330 5%	1/10W
R61	1-216-025-00	METAL GLAZE 100 5%	1/10W	R130	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W (KV-29C2B)
R62	1-216-025-00	METAL GLAZE 100 5%	1/10W	R131	1-216-073-00	METAL GLAZE 10K 5%	1/10W (KV-29C2B)
R63	1-216-025-00	METAL GLAZE 100 5%	1/10W	R132	1-216-025-00	METAL GLAZE 100 5%	1/10W (KV-29C2B)
R64	1-216-025-00	METAL GLAZE 100 5%	1/10W	R133	1-216-041-00	METAL GLAZE 470 5%	1/10W (KV-29C2B)
R65	1-216-025-00	METAL GLAZE 100 5%	1/10W	R134	1-216-001-00	METAL GLAZE 10 5%	1/10W (KV-29C2B)
R66	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W	R135	1-216-045-00	METAL GLAZE 680 5%	1/10W (KV-29C2B)
R67	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W	R136	1-216-033-00	METAL GLAZE 220 5%	1/10W (KV-29C2B)
R69	1-216-025-00	METAL GLAZE 100 5%	1/10W	R137	1-216-049-00	METAL GLAZE 1K 5%	1/10W (KV-29C2B)
R70	1-216-025-00	METAL GLAZE 100 5%	1/10W	R138	1-216-041-00	METAL GLAZE 470 5%	1/10W (KV-29C2B)
R71	1-216-025-00	METAL GLAZE 100 5%	1/10W	R200	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R72	1-216-025-00	METAL GLAZE 100 5%	1/10W	R201	1-216-033-00	METAL GLAZE 220 5%	1/10W
R73	1-216-025-00	METAL GLAZE 100 5%	1/10W	R202	1-216-033-00	METAL GLAZE 220 5%	1/10W
R74	1-216-025-00	METAL GLAZE 100 5%	1/10W	R203	1-216-025-00	METAL GLAZE 100 5%	1/10W
R75	1-216-025-00	METAL GLAZE 100 5%	1/10W	R204	1-216-025-00	METAL GLAZE 100 5%	1/10W
R76	1-216-025-00	METAL GLAZE 100 5%	1/10W	R205	1-216-689-11	METAL GLAZE 39K 5%	1/10W
R77	1-216-025-00	METAL GLAZE 100 5%	1/10W	R206	1-216-033-00	METAL GLAZE 220 5%	1/10W
R78	1-216-025-00	METAL GLAZE 100 5%	1/10W	R208	1-216-041-00	METAL GLAZE 470 5%	1/10W
R79	1-216-033-00	METAL GLAZE 220 5%	1/10W	R209	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R80	1-216-049-00	METAL GLAZE 1K 5%	1/10W	R210	1-216-017-91	METAL GLAZE 47 5%	1/10W
R81	1-216-081-00	METAL GLAZE 22K 5%	1/10W	R211	1-216-033-00	METAL GLAZE 220 5%	1/10W
R82	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W	R212	1-216-022-00	METAL GLAZE 75 5%	1/10W
R83	1-216-073-00	METAL GLAZE 10K 5%	1/10W	R213	1-216-022-00	METAL GLAZE 75 5%	1/10W
R84	1-216-081-00	METAL GLAZE 22K 5%	1/10W	R214	1-216-025-00	METAL GLAZE 100 5%	1/10W
R85	1-216-073-00	METAL GLAZE 10K 5%	1/10W	R216	1-216-025-00	METAL GLAZE 100 5%	1/10W
R86	1-216-077-00	METAL GLAZE 15K 5%	1/10W	R217	1-216-113-00	METAL GLAZE 470K 5%	1/10W
R87	1-216-081-00	METAL GLAZE 22K 5%	1/10W	R218	1-216-025-00	METAL GLAZE 100 5%	1/10W
R88	1-216-025-00	METAL GLAZE 100 5%	1/10W	R219	1-216-113-00	METAL GLAZE 470K 5%	1/10W
R91	1-216-025-00	METAL GLAZE 100 5%	1/10W	R220	1-216-295-00	METAL GLAZE 0 5%	1/10W
R92	1-216-025-00	METAL GLAZE 100 5%	1/10W	R221	1-216-039-00	METAL GLAZE 390 5%	1/10W
R93	1-216-033-00	METAL GLAZE 220 5%	1/10W	R222	1-216-089-00	METAL GLAZE 47K 5%	1/10W
R94	1-216-033-00	METAL GLAZE 220 5%	1/10W	R223	1-216-295-00	METAL GLAZE 0 5%	1/10W
R95	1-216-033-00	METAL GLAZE 220 5%	1/10W	R224	1-216-039-00	METAL GLAZE 390 5%	1/10W
R97	1-216-295-00	METAL GLAZE 0 5%	1/10W	R225	1-216-089-00	METAL GLAZE 47K 5%	1/10W
R98	1-216-295-00	METAL GLAZE 0 5%	1/10W	R226	1-216-033-00	METAL GLAZE 220 5%	1/10W
R101	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W	R227	1-216-022-00	METAL GLAZE 75 5%	1/10W
R102	1-216-025-00	METAL GLAZE 100 5%	1/10W	R228	1-216-022-00	METAL GLAZE 75 5%	1/10W
R103	1-216-025-00	METAL GLAZE 100 5%	1/10W	R229	1-216-033-00	METAL GLAZE 220 5%	1/10W
R104	1-216-073-00	METAL GLAZE 10K 5%	1/10W	R230	1-216-022-00	METAL GLAZE 75 5%	1/10W
R105	1-216-113-00	METAL GLAZE 470K 5%	1/10W	R232	1-216-025-00	METAL GLAZE 100 5%	1/10W
R106	1-216-073-00	METAL GLAZE 10K 5%	1/10W				
R110	1-216-073-00	METAL GLAZE 10K 5%	1/10W				
R111	1-216-029-00	METAL GLAZE 150 5%	1/10W				
R112	1-216-029-00	METAL GLAZE 150 5%	1/10W				
R113	1-216-001-00	METAL GLAZE 10 5%	1/10W				
R114	1-216-029-00	METAL GLAZE 150 5%	1/10W				
R115	1-216-037-00	METAL GLAZE 330 5%	1/10W				
R116	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W				
R117	1-216-055-00	METAL GLAZE 1.8K 5%	1/10W				





REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R233	1-216-025-00	METAL GLAZE 100 5%	1/10W	R337	1-216-025-00	METAL GLAZE 100 5%	1/10W
R234	1-216-113-00	METAL GLAZE 470K 5%	1/10W	R338	1-216-051-00	METAL GLAZE 1.2K 5%	1/10W
R235	1-216-025-00	METAL GLAZE 100 5%	1/10W	R339	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R236	1-216-113-00	METAL GLAZE 470K 5%	1/10W	R340	1-216-025-00	METAL GLAZE 100 5%	1/10W
R237	1-216-295-00	METAL GLAZE 0 5%	1/10W	R341	1-216-025-00	METAL GLAZE 100 5%	1/10W
R238	1-216-089-00	METAL GLAZE 47K 5%	1/10W	R342	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R239	1-216-039-00	METAL GLAZE 390 5%	1/10W	R343	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W
R240	1-216-295-00	METAL GLAZE 0 5%	1/10W	R344	1-216-067-00	METAL GLAZE 5.6K 5%	1/10W
R241	1-216-089-00	METAL GLAZE 47K 5%	1/10W	R345	1-216-025-00	METAL GLAZE 100 5%	1/10W
R242	1-216-039-00	METAL GLAZE 390 5%	1/10W	R346	1-216-063-91	METAL GLAZE 3.9K 5%	1/10W
R243	1-216-033-00	METAL GLAZE 220 5%	1/10W	R347	1-216-025-00	METAL GLAZE 100 5%	1/10W
R244	1-216-033-00	METAL GLAZE 220 5%	1/10W	R348	1-216-025-00	METAL GLAZE 100 5%	1/10W
R245	1-216-073-00	METAL GLAZE 10K 5%	1/10W	R349	1-216-025-00	METAL GLAZE 100 5%	1/10W
R246	1-216-053-00	METAL GLAZE 1.5K 5%	1/10W	R350	1-216-042-00	METAL GLAZE 510 5%	1/10W
R247	1-216-053-00	METAL GLAZE 1.5K 5%	1/10W	R351	1-216-053-00	METAL GLAZE 1.5K 5%	1/10W
R249	1-216-001-00	METAL GLAZE 10 5%	1/10W	R352	1-216-077-00	METAL GLAZE 15K 5%	1/10W
R255	1-216-025-00	METAL GLAZE 100 5%	1/10W	R353	1-216-033-00	METAL GLAZE 220 5%	1/10W
R256	1-216-025-00	METAL GLAZE 100 5%	1/10W	R354	1-216-295-00	METAL GLAZE 0 5%	1/10W
R270	1-216-022-00	METAL GLAZE 75 5%	1/10W	R357	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R271	1-216-022-00	METAL GLAZE 75 5%	1/10W	R370	1-216-295-00	METAL GLAZE 0 5%	1/10W
R272	1-216-022-00	METAL GLAZE 75 5%	1/10W	R1001	1-216-025-00	METAL GLAZE 100 5%	1/10W
R273	1-216-022-00	METAL GLAZE 75 5%	1/10W	R1002	1-216-025-00	METAL GLAZE 100 5%	1/10W
R280	1-216-049-00	METAL GLAZE 1K 5%	1/10W	R1010	1-216-295-00	METAL GLAZE 0 5%	1/10W
R281	1-216-089-00	METAL GLAZE 47K 5%	1/10W	R1012	1-216-041-00	METAL GLAZE 470 5%	1/10W
R282	1-216-093-00	METAL GLAZE 68K 5%	1/10W	R1014	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W
R283	1-216-073-00	METAL GLAZE 10K 5%	1/10W	R1020	1-216-097-00	METAL GLAZE 100K 5%	1/10W
R284	1-216-089-00	METAL GLAZE 47K 5%	1/10W	R1021	1-216-029-00	METAL GLAZE 150 5%	1/10W
R285	1-216-093-00	METAL GLAZE 68K 5%	1/10W	R1022	1-216-029-00	METAL GLAZE 150 5%	1/10W
R286	1-216-073-00	METAL GLAZE 10K 5%	1/10W	R1023	1-216-029-00	METAL GLAZE 150 5%	1/10W
R300	1-216-025-00	METAL GLAZE 100 5%	1/10W	R1024	1-216-025-00	METAL GLAZE 100 5%	1/10W
R301	1-216-033-00	METAL GLAZE 220 5%	1/10W	R1026	1-216-025-00	METAL GLAZE 100 5%	1/10W
R302	1-216-295-00	METAL GLAZE 0 5%	1/10W	R1027	1-216-025-00	METAL GLAZE 100 5%	1/10W
R303	1-216-295-00	METAL GLAZE 0 5%	1/10W	R1028	1-216-025-00	METAL GLAZE 100 5%	1/10W
R308	1-216-025-00	METAL GLAZE 100 5%	1/10W	< TUNER >			
R309	1-216-033-00	METAL GLAZE 220 5%	1/10W	TU101	1-693-338-11	TUNER/VIF (ARP)	
R310	1-216-033-00	METAL GLAZE 220 5%	1/10W			(KV-29C2A/29C2D/29C2E/29C2K/29C2R)	
R311	1-216-295-00	METAL GLAZE 0 5%	1/10W		1-693-340-11	TUNER/VIF (FR) (KV-29C2B)	
R312	1-216-295-00	METAL GLAZE 0 5%	1/10W	< CRYSTAL >			
R313	1-216-295-00	METAL GLAZE 0 5%	1/10W	X1	1-767-154-21	VIBRATOR, CERAMIC	
R314	1-216-295-00	METAL GLAZE 0 5%	1/10W	X201	1-760-628-11	VIBRATOR, CRYSTAL 18.432MHz	
R315	1-216-295-00	METAL GLAZE 0 5%	1/10W	X301	1-567-504-11	OSCILLATOR, CRYSTAL	
R316	1-216-033-00	METAL GLAZE 220 5%	1/10W	X302	1-567-505-11	OSCILLATOR, CRYSTAL	
R318	1-216-689-11	METAL GLAZE 39K 5%	1/10W	X303	1-767-127-11	VIBRATOR, CERAMIC	
R319	1-216-081-00	METAL GLAZE 22K 5%	1/10W	X1001	1-579-965-21	VIBRATOR, CRYSTAL 20.5MHz	
R320	1-216-025-00	METAL GLAZE 100 5%	1/10W	*****			
R321	1-216-025-00	METAL GLAZE 100 5%	1/10W	*A-1638-085-A C BOARD, COMPLETE			
R322	1-216-025-00	METAL GLAZE 100 5%	1/10W	*****			
R323	1-216-033-00	METAL GLAZE 220 5%	1/10W	< CAPACITOR >			
R324	1-216-063-91	METAL GLAZE 3.9K 5%	1/10W	C702	1-102-115-00	CERAMIC 560PF 10% 50V	
R326	1-216-025-00	METAL GLAZE 100 5%	1/10W	C703	1-102-116-00	CERAMIC 680PF 10% 50V	
R327	1-216-025-00	METAL GLAZE 100 5%	1/10W	C708	1-162-114-00	CERAMIC 0.0047MF 2KV	
R328	1-216-129-00	METAL GLAZE 2.2M 5%	1/10W	C710	1-107-652-11	ELECT 10MF 20% 250V	
R329	1-216-089-00	METAL GLAZE 47K 5%	1/10W	C712	1-102-116-00	CERAMIC 680PF 10% 50V	
R330	1-216-025-00	METAL GLAZE 100 5%	1/10W	C714	1-126-967-11	ELECT 47MF 20% 16V	
R331	1-216-059-00	METAL GLAZE 2.7K 5%	1/10W	C717	1-102-114-00	CERAMIC 470PF 10% 50V	
R332	1-216-025-00	METAL GLAZE 100 5%	1/10W				
R333	1-216-075-00	METAL GLAZE 12K 5%	1/10W				
R334	1-216-041-00	METAL GLAZE 470 5%	1/10W				
R335	1-208-806-11	METAL CHIP 10K 0.50%	1/10W				
R336	1-216-109-00	METAL GLAZE 330K 5%	1/10W				

C**D2**

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C718	1-102-114-00	CERAMIC 470PF	10% 50V	R723	1-249-417-11	CARBON 1K 5%	1/4W
C719	1-102-114-00	CERAMIC 470PF	10% 50V	R724	1-202-846-00	SOLID 470K 10%	1/2W
C722	1-101-880-00	CERAMIC 47PF	5% 50V	R726	1-202-822-00	SOLID 2.2K 10%	1/2W
C723	1-101-880-00	CERAMIC 47PF	5% 50V	R727	1-247-815-91	CARBON 220 5%	1/4W
C724	1-101-880-00	CERAMIC 47PF	5% 50V	R728	1-216-350-11	METAL OXIDE 1.2 5%	1W F
< CONNECTOR >				R729	1-249-408-11	CARBON 180 5%	1/4W
CN701	1-778-037-11	PIN, CONNECTOR 6P		R731	1-249-423-11	CARBON 3.3K 5%	1/4W
CN702	1-695-915-11	TAB (CONTACT)		R733	1-249-415-11	CARBON 680 5%	1/4W
CN703	*1-568-882-51	PIN, CONNECTOR 7P		R734	1-247-807-31	CARBON 100 5%	1/4W
< DIODE >				R735	1-249-415-11	CARBON 680 5%	1/4W
D701	8-719-109-72	DIODE RD3.9ES-B2		R736	1-216-486-00	METAL OXIDE 8.2K 5%	3W F
D702	8-719-991-33	DIODE 1SS133T-77		R739	1-249-417-11	CARBON 1K 5%	1/4W
D706	8-719-991-33	DIODE 1SS133T-77		R740	1-249-415-11	CARBON 680 5%	1/4W
D707	8-719-991-33	DIODE 1SS133T-77		R741	1-202-549-00	SOLID 100 20%	1/2W
D708	8-719-991-33	DIODE 1SS133T-77		R744	1-249-421-11	CARBON 2.2K 5%	1/4W
D709	8-719-991-33	DIODE 1SS133T-77		R745	1-249-421-11	CARBON 2.2K 5%	1/4W
D710	8-719-991-33	DIODE 1SS133T-77		R746	1-249-421-11	CARBON 2.2K 5%	1/4W
D711	8-719-302-43	DIODE ELLZ		R747	1-249-437-11	CARBON 47K 5%	1/4W
D714	8-719-991-33	DIODE 1SS133T-77		R748	1-249-417-11	CARBON 1K 5%	1/4W
D715	8-719-991-33	DIODE 1SS133T-77		R749	1-249-435-11	CARBON 33K 5%	1/4W
D716	8-719-991-33	DIODE 1SS133T-77		< VARIABLE RESISTOR >			
D717	8-719-991-33	DIODE 1SS133T-77		RV701	1-230-641-11	RES, ADJ, METAL GLAZE 2.2M	
D718	8-719-991-33	DIODE 1SS133T-77		RV702	1-241-656-21	RES, ADJ, METAL FILM 110M	
D719	8-719-991-33	DIODE 1SS133T-77		*****			
D720	8-719-991-33	DIODE 1SS133T-77		*A-1640-250-A D2 BOARD, COMPLETE			
< CRT SOCKET >				*****			
J701 	1-526-990-22	SOCKET, CRT		< CAPACITOR >			
< COIL >				C1801	1-126-967-11	ELECT 47MF 20%	50V
L704	1-408-609-41	INDUCTOR 33UH		C1803	1-137-368-11	FILM 0.0047MF 5%	50V
< TRANSISTOR >				C1804	1-126-964-11	ELECT 10MF 20%	50V
Q702	8-729-119-78	TRANSISTOR 28C2785-HFE		C1807	1-137-366-11	FILM 0.0022MF 5%	50V
Q703	8-729-906-70	TRANSISTOR BF871-127		< CONNECTOR >			
Q704	8-729-200-17	TRANSISTOR 2SA1091-0		CN1801	1-573-299-21	CONNECTOR, BOARD TO BOARD 10P	
Q705	8-729-119-78	TRANSISTOR 28C2785-HFE		CN1803	*1-568-878-51	PIN, CONNECTOR 3P	
Q706	8-729-906-70	TRANSISTOR BF871-127		< DIODE >			
Q707	8-729-200-17	TRANSISTOR 2SA1091-0		D1802	8-719-110-17	DIODE RD10ESE2	
Q708	8-729-119-78	TRANSISTOR 28C2785-HFE		< IC >			
Q709	8-729-906-70	TRANSISTOR BF871-127		IC1801	8-759-701-59	IC NJM78M09FA	
Q710	8-729-200-17	TRANSISTOR 2SA1091-0		IC1802	8-759-603-37	IC M5216P	
Q711	8-729-173-38	TRANSISTOR 2SA733-K		< LINK IC >			
< RESISTOR >				JW1802 	1-532-605-91	LINK, IC 0.4A (ICP-F10)	
R704	1-216-486-00	METAL OXIDE 8.2K 5%	3W F	< RESISTOR >			
R705	1-202-822-00	SOLID 2.2K 10%	1/2W	R1807	1-247-883-00	CARBON 150K 5%	1/4W
R706	1-247-815-91	CARBON 220 5%	1/4W	R1809	1-249-429-11	CARBON 10K 5%	1/4W
R707	1-249-408-11	CARBON 180 5%	1/4W	R1810	1-249-429-11	CARBON 10K 5%	1/4W
R709	1-202-844-00	SOLID 330K 10%	1/2W	R1811	1-249-429-11	CARBON 10K 5%	1/4W
R711	1-247-843-11	CARBON 3.3K 5%	1.4W	R1812	1-249-429-11	CARBON 10K 5%	1/4W
R712	1-202-822-00	SOLID 2.2K 10%	1/2W				
R714	1-216-486-00	METAL OXIDE 8.2K 5%	3W F				
R715	1-249-417-11	CARBON 1K 5%	1/4W				
R716	1-247-815-91	CARBON 220 5%	1/4W				
R717	1-249-408-11	CARBON 180 5%	1/4W				
R718	1-202-814-11	SOLID 33K 10%	1/2W				
R720	1-249-423-11	CARBON 3.3K 5%	1/4W				
R722	1-202-848-00	SOLID 680K 10%	1/2W				

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KV-29C2

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
	*A-1642-174-A	D BOARD, COMPLETE *****		C640	1-106-220-00	MYLAR	0.1MF 10% 100V
	4-201-023-01	SPACER, INSULATING		C644	1-137-043-11	FILM	0.0047MF 10% 400V
	4-202-373-01	SPRING, IC		C647	1-162-116-00	CERAMIC	680PF 10% 2KV
	*4-203-258-01	HOLDER, LED		C651	1-102-228-00	CERAMIC	470PF 10% 500V
	< CAPACITOR >			C800	1-137-368-11	FILM	0.0047MF 5% 50V
C502	1-102-824-00	CERAMIC	470PF 5% 50V	C801	1-137-372-11	FILM	0.022MF 5% 50V
C503	1-136-165-00	FILM	0.1MF 5% 50V	C802	1-136-161-00	FILM	0.047MF 5% 50V
C504	1-102-824-00	CERAMIC	470PF 5% 50V	C804	1-136-165-00	FILM	0.1MF 5% 50V
C506	1-126-941-11	ELECT	470MF 20% 25V	C805	1-136-207-11	FILM	0.047MF 10% 250V
C507	1-109-953-11	ELECT	2.2MF 20% 50V	C806	1-104-999-11	MYLAR	0.1MF 10% 200V
C509	1-136-165-00	FILM	0.1MF 5% 50V	C807	1-136-109-00	FILM	0.68MF 5% 200V
C510	1-126-969-11	ELECT	220MF 20% 50V	C808	1-137-205-11	FILM	0.1MF 5% 400V
C511	1-136-202-11	FILM	0.33MF 5% 63V	C810	1-107-683-11	ELECT	2.2MF 250V
C513	1-106-220-00	MYLAR	0.1MF 10% 100V	C811	1-102-212-00	CERAMIC	820PF 10% 500V
C514	1-136-165-00	FILM	0.1MF 5% 50V	C812	1-136-125-00	FILM	0.68MF 5% 400V
C515	1-126-941-11	ELECT	470MF 20% 25V	C813	1-129-722-00	FILM	0.047MF 10% 630V
C517	1-126-941-11	ELECT	470MF 20% 25V	C814	1-136-565-11	FILM	0.015MF 3% 1.4KV
C518	1-102-228-00	CERAMIC	470PF 10% 500V	C815	1-136-562-11	MYLAR	0.0082MF 10% 400V
C519	1-102-228-00	CERAMIC	470PF 10% 500V	C816	1-161-754-00	CERAMIC	0.001MF 10% 2KV
C520	1-126-941-11	ELECT	470MF 20% 25V	C817	1-161-754-00	CERAMIC	0.001MF 10% 2KV
C521	1-107-698-11	ELECT	10MF 20% 25V	C818	1-162-134-11	CERAMIC	470PF 10% 2KV
C522	1-126-964-11	ELECT	10MF 20% 50V	C819	1-136-208-11	FILM	0.068MF 10% 250V
C523	1-136-165-00	FILM	0.1MF 5% 50V	C820	1-102-114-00	CERAMIC	470PF 10% 50V
C600 \triangle	1-113-890-51	ELECT	0.0022MF 20% 250V	C821	1-162-114-00	CERAMIC	0.0047MF 10% 2KV
C601 \triangle	1-161-964-91	CERAMIC	0.0047MF 250V	C822	1-107-662-11	ELECT	22MF 20% 250V
C602 \triangle	1-161-964-91	CERAMIC	0.0047MF 250V	C824	1-123-024-21	ELECT	33MF 160V
C603	1-125-555-11	ELECT	330MF 20% 400V	C829	1-124-902-00	ELECT	0.47MF 20% 50V
C604	1-126-968-11	ELECT	100MF 20% 50V	C830	1-124-902-00	ELECT	0.47MF 20% 50V
C605	1-107-929-11	ELECT	10MF 20% 100V	C832	1-124-903-11	ELECT	1MF 20% 50V
C606	1-162-318-11	CERAMIC	0.001MF 10% 500V	C834	1-128-551-11	ELECT	22MF 20% 25V
C607	1-104-666-11	ELECT	220MF 20% 25V	C835	1-162-318-11	CERAMIC	0.001MF 10% 500V
C608	1-109-880-11	FILM	0.0015MF 3% 2KV	C836	1-162-117-00	CERAMIC	100PF 10% 500V
C611	1-102-228-00	CERAMIC	470PF 10% 500V	C838	1-102-228-00	CERAMIC	470PF 10% 500V
C612	1-111-160-11	ELECT	22MF 20% 100V	C839	1-136-207-11	FILM	0.047MF 10% 250V
C613	1-124-347-00	ELECT	100MF 20% 160V	C845	1-102-115-00	CERAMIC	560PF 10% 50V
C614	1-128-526-11	ELECT	100MF 20% 25V	C901	1-101-810-00	CERAMIC	100PF 5% 500V
C615	1-111-067-11	ELECT	0.001MF 20% 25V	C902	1-137-372-11	FILM	0.022MF 5% 50V
C616	1-111-067-11	ELECT	0.001MF 20% 25V	C903	1-137-372-11	FILM	0.022MF 5% 50V
C617	1-128-339-11	ELECT	2200MF 20% 16V	C904	1-104-665-11	ELECT	100MF 20% 25V
C618	1-136-165-00	FILM	0.1MF 5% 50V	C905	1-126-964-11	ELECT	10MF 20% 50V
C619	1-102-228-00	CERAMIC	470PF 10% 500V	C906	1-126-964-11	ELECT	10MF 20% 50V
C620	1-102-228-00	CERAMIC	470PF 10% 500V	C907	1-126-964-11	ELECT	10MF 20% 50V
C621	1-136-165-00	FILM	0.1MF 5% 50V	C908	1-126-964-11	ELECT	10MF 20% 50V
C622	1-107-925-11	ELECT	1MF 20% 100V	C911	1-126-964-11	ELECT	10MF 20% 50V
C623	1-104-666-11	ELECT	220MF 20% 25V	C913	1-101-810-00	CERAMIC	100PF 5% 500V
C624	1-136-165-00	FILM	0.1MF 5% 50V	C914	1-101-004-00	CERAMIC	0.01MF 50V
C625	1-126-967-11	ELECT	47MF 20% 50V	C915	1-136-166-00	FILM	0.12MF 5% 50V
C626	1-104-666-11	ELECT	220MF 20% 25V	C1200	1-136-165-00	FILM	0.1MF 5% 50V
C628	1-126-964-11	ELECT	10MF 20% 50V	C1201	1-136-173-00	FILM	0.47MF 5% 50V
C629	1-111-097-11	ELECT	2200MF 20% 35V	C1202	1-136-173-00	FILM	0.47MF 5% 50V
C630	1-111-097-11	ELECT	2200MF 20% 35V	C1203	1-136-169-00	FILM	0.22MF 5% 50V
C631	1-126-965-11	ELECT	22MF 20% 50V	C1204	1-136-169-00	FILM	0.22MF 5% 50V
C632	1-104-666-11	ELECT	220MF 20% 25V	C1205	1-101-005-00	CERAMIC	0.022MF 50V
C633 \triangle	1-107-564-11	FILM	0.22MF 20% 300V	C1206	1-101-005-00	CERAMIC	0.022MF 50V
C634 \triangle	1-107-564-11	FILM	0.22MF 20% 300V	C1207	1-126-933-11	ELECT	100MF 20% 16V
C635 \triangle	1-107-564-11	FILM	0.22MF 20% 300V	C1208	1-126-963-11	ELECT	4.7MF 20% 50V
C636 \triangle	1-113-890-51	ELECT	0.0022MF 20% 250V	C1209	1-126-963-11	ELECT	4.7MF 20% 50V
C638	1-136-203-11	FILM	0.01MF 5% 630V	C1212	1-162-318-11	CERAMIC	0.001MF 10% 500V
				C1213	1-162-318-11	CERAMIC	0.001MF 10% 500V
				C1214	1-126-933-11	ELECT	100MF 20% 16V

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C1215	1-136-173-00	FILM 0.47MF 5%	50V	D815	8-719-908-03	DIODE GP08D	
C1216	1-137-366-11	FILM 0.0022MF 5%	50V	D817	8-719-109-85	DIODE RD5.1ES-B2	
C1217	1-137-366-11	FILM 0.0022MF 5%	50V	D901	8-719-030-11	DIODE SLA-570KT3F	
C1218	1-126-935-11	ELECT 470MF 20%	16V	D902	8-719-923-60	DIODE MTZJ-T-77-9.1A	
< CONNECTOR >				D903	8-719-923-60	DIODE MTZJ-T-77-9.1A	
CN600	\triangle 1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P		D904	8-719-923-60	DIODE MTZJ-T-77-9.1A	
CN601	\triangle 1-508-765-11	PIN, CONNECTOR (5MM PITCH) 3P		D905	8-719-923-60	DIODE MTZJ-T-77-9.1A	
CN603	\triangle *1-580-844-11	PIN, CONNECTOR (POWER)		D906	8-719-923-60	DIODE MTZJ-T-77-9.1A	
CN800	*1-580-798-11	CONNECTOR PIN (DY) 6P		D1201	8-719-109-72	DIODE RD3.9ES-B2	
CN801	*1-573-296-21	CONNECTOR, BOARD TO BOARD 10P		< FUSE >			
CN803	1-695-915-11	TAB (CONTACT)		F601	\triangle 1-576-232-21	FUSE (H.B.C.) 5A/250V	
CN804	1-778-037-11	PIN, CONNECTOR 6P			\triangle 1-533-230-11	HOLDER, FUSE ;F601	
CN900	1-568-678-11	TERMINAL BLOCK, 8 3P		< FERRITE BEAD >			
CN902	1-695-299-11	CONNECTOR, BOARD TO BOARD 50P		FB600	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
CN1401	*1-568-880-51	PIN, CONNECTOR 5P		FB601	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
CN1403	1-564-511-11	PIN, CONNECTOR 8P		FB602	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
CN1408	*1-568-879-11	PIN, CONNECTOR 4P		FB604	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH	
< DIODE >				FB605	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH	
D500	8-719-109-85	DIODE RD5.1ES-B2		FB606	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
D502	8-719-979-85	DIODE EGP20G		FB607	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
D503	8-719-979-85	DIODE EGP20G		FB608	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH	
D504	8-719-991-33	DIODE 1SS133T-77		FB800	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH	
D505	8-719-982-03	DIODE MTZJ-3.6A		< IC >			
D506	8-719-991-33	DIODE 1SS133T-77		IC500	8-759-192-71	IC STV9379	
D507	8-719-109-85	DIODE RD5.1ES-B2		IC600	8-749-010-92	IC STR-S6709	
D600	8-719-510-53	DIODE D4SB60L		IC601	\triangle 8-749-924-92	IC TLP721 (D4-)	
D601	8-719-046-77	DIODE EML-V1		IC602	8-749-920-61	IC SE-135N	
D603	8-719-109-97	DIODE RD6.8ES-B2		IC603	8-759-144-82	IC μ PC2405HF	
D604	8-719-046-75	DIODE EU-1-V1		IC604	8-759-510-52	IC TEA7605	
D605	8-719-302-43	DIODE EL1Z		IC606	8-759-267-25	IC LM2940T-9.0	
D606	8-719-302-43	DIODE EL1Z		IC800	8-759-103-93	IC μ PC393C	
D607	8-719-046-78	DIODE EG-1Z-V1		IC900	8-747-905-11	RAY CATCHER ELEMENT SBX1790-51	
D608	8-719-302-06	DIODE EU2A		IC901	8-749-012-12	IC IS474	
D609	8-719-301-64	DIODE RU4DS		IC1200	8-759-250-68	IC TDA7264	
D610	8-719-046-74	DIODE AU-01Z-V1		IC1201	8-759-502-21	IC TDA2822M	
D611	8-719-045-48	DIODE FML-G12S		< JACK SOCKET >			
D612	8-719-046-76	DIODE RU3YX-V1		J900	1-764-606-11	JACK	
D613	8-719-045-48	DIODE FML-G12S		J1200	1-764-767-11	JACK, PIN	
D614	8-719-045-48	DIODE FML-G12S		< COIL >			
D615	8-719-046-75	DIODE EU-1-V1		L502	1-412-519-11	INDUCTOR 3.3UH	
D616	8-719-110-03	DIODE RD7.5ESB2		L503	1-412-519-11	INDUCTOR 3.3UH	
D617	8-719-991-33	DIODE 1SS133T-77		L609	1-412-533-21	INDUCTOR 47UH	
D618	8-719-991-33	DIODE 1SS133T-77		L611	1-412-527-11	INDUCTOR 15UH	
D619	8-719-991-33	DIODE 1SS133T-77		L612	1-412-522-41	INDUCTOR 5.6UH	
D620	8-719-991-33	DIODE 1SS133T-77		L613	1-412-522-41	INDUCTOR 5.6UH	
D622	8-719-923-60	DIODE MTZJ-T-77-9.1A		L615	1-412-529-11	INDUCTOR 22UH	
D625	8-719-991-33	DIODE 1SS133T-77		L616	1-412-533-21	INDUCTOR 47UH	
D626	8-719-046-74	DIODE AU-01Z-V1		L801	1-459-111-00	COIL, DRAM CORE (CDI)	
D631	8-719-109-93	DIODE RD6.2ESB2		L802	1-459-104-00	COIL, WITH CORE	
D800	8-719-991-33	DIODE 1SS133T-77		L803	1-420-872-00	COIL, AIR-CORE	
D801	8-719-991-33	DIODE 1SS133T-77		L804	1-406-903-11	COIL, HORIZONTAL LINEARITY	
D802	8-719-991-33	DIODE 1SS133T-77		L805	1-406-675-11	COIL, CHOKE 4.7MME	
D803	8-719-908-03	DIODE GP08D		L809	1-412-533-21	INDUCTOR 47UH	
D807	8-719-302-43	DIODE EL1Z		L811	1-406-979-11	COIL, CHOKE 220UH	
D808	8-719-908-03	DIODE GP08D		L813	1-412-552-11	INDUCTOR 2.2MME	
D809	8-719-018-82	DIODE RGP02-20EL-6394					
D810	8-719-302-43	DIODE EL1Z					
D812	8-719-038-49	DIODE FMS-3FU-LF027-1					

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The components identified by shading and marked \triangle are critical for safety. Replace only with the part number specified.

D

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
L901	1-408-603-31	INDUCTOR	10UH	R608	1-216-365-00	METAL OXIDE	0.47 5% 2W F
L902	1-408-603-31	INDUCTOR	10UH	R610	1-215-421-00	METAL	1K 1% 1/4W
L903	1-408-409-00	INDUCTOR	10UH	R611	1-216-354-11	METAL OXIDE	2.7 5% 1W F
L904	1-408-409-00	INDUCTOR	10UH	R612	1-249-428-11	CARBON	8.2K 5% 1/4W
< IC LINK >				R613	1-249-417-11	CARBON	1K 5% 1/4W
PS600	\triangle 1-532-686-91	LINK, IC 2.7A (ICP-F75)		R614	1-215-877-11	METAL OXIDE	22K 5% 1W F
PS601	\triangle 1-532-686-91	LINK, IC 2.7A (ICP-F75)		R615	1-249-435-11	CARBON	33K 5% 1/4W
PS602	\triangle 1-532-686-91	LINK, IC 2.7A (ICP-F75)		R616	1-215-471-00	METAL	120K 1% 1/4W
PS603	\triangle 1-532-686-91	LINK, IC 2.7A (ICP-F75)		R617	1-215-901-00	METAL OXIDE	33K 5% 2W F
< TRANSISTOR >				R618	1-247-863-91	CARBON	22K 5% 1/4W
Q501	8-729-119-78	TRANSISTOR 2SC2785-HFE		R619	1-216-425-11	METAL OXIDE	56 5% 1W F
Q502	8-729-119-76	TRANSISTOR 2SA1175-HFE		R620	1-260-131-11	CARBON	470K 5% 1/2W
Q503	8-729-900-89	TRANSISTOR DTC144ES		R621	1-216-425-11	METAL OXIDE	56 5% 1W F
Q601	8-729-025-04	TRANSISTOR 2SC3852A		R622	1-249-437-11	CARBON	47K 5% 1/4W
Q602	8-729-320-28	TRANSISTOR 2SA1667		R623	1-249-429-11	CARBON	10K 5% 1/4W
Q603	8-729-805-05	TRANSISTOR 2SC3601-E		R624	1-249-393-11	CARBON	10 5% 1/4W F
Q604	8-729-024-35	TRANSISTOR 2SC2808STP-R		R625	1-249-434-11	CARBON	27K 5% 1/4W
Q605	8-729-119-78	TRANSISTOR 2SC2785-HFE		R626	1-249-430-11	CARBON	12K 5% 1/4W
Q606	8-729-900-65	TRANSISTOR DTA144ES		R627	1-216-347-11	METAL OXIDE	0.68 5% 1W F
Q607	8-729-119-78	TRANSISTOR 2SC2785-HFE		R628	1-249-415-11	CARBON	680 5% 1/4W F
Q800	8-729-119-78	TRANSISTOR 2SC2785-HFE		R629	\triangle 1-244-945-91	CARBON	1M 5% 1.2W
Q801	8-729-017-06	TRANSISTOR 2SC4793		R630	\triangle 1-218-265-21	METAL	8.2M 5% 1W
Q802	8-729-016-32	TRANSISTOR 2SC4927-01		R631	\triangle 1-205-949-11	WIREWOUND	1.8 5% 10W
Q803	8-729-119-80	TRANSISTOR 2SC2688-LK		R632	1-247-807-31	CARBON	100 5% 1/4W
Q805	8-729-900-89	TRANSISTOR DTC144ES		R633	1-247-807-31	CARBON	100 5% 1/4W
Q900	8-729-119-78	TRANSISTOR 2SC2785-HFE		R634	1-249-397-11	CARBON	22 5% 1/4W F
Q1200	8-729-119-78	TRANSISTOR 2SC2785-HFE		R635	1-249-437-11	CARBON	47K 5% 1/4W
Q1201	8-729-900-74	TRANSISTOR DTC143TS		R636	1-249-417-11	CARBON	1K 5% 1/4W
Q1202	8-729-900-80	TRANSISTOR DTC144ES		R637	1-247-815-91	CARBON	220 5% 1/4W
Q1203	8-729-900-74	TRANSISTOR DTC143TS		R638	1-247-863-91	CARBON	22K 5% 1/4W
Q1204	8-729-900-74	TRANSISTOR DTC143TS		R639	1-215-439-00	METAL	5.6K 1% 1/4W
< RESISTOR >				R642	\triangle 1-205-949-11	WIREWOUND	1.8 5% 10W
R500	1-215-457-00	METAL	33K 1% 1/4W	R645	1-249-422-11	CARBON	2.7K 5% 1/4W
R502	1-249-421-11	CARBON	2.2K 5% 1/4W	R646	1-249-377-11	CARBON	0.47 5% 1/4W F
R503	1-249-429-11	CARBON	10K 5% 1/4W	R647	1-202-933-61	FUSIBLE	0.1 10% 1/2W F
R504	1-215-455-00	METAL	27K 1% 1/4W	R649	1-249-426-11	CARBON	5.6K 5% 1/4W F
R505	1-249-382-11	CARBON	1.2 5% 1/4W F	R800	1-249-421-11	CARBON	2.2K 5% 1/4W
R506	1-215-439-00	METAL	5.6K 1% 1/4W	R802	1-247-863-91	CARBON	22K 5% 1/4W
R507	1-215-888-00	METAL OXIDE	220 5% 2W F	R803	1-249-424-11	CARBON	3.9K 5% 1/4W
R508	1-216-371-00	METAL OXIDE	1.5 5% 2W F	R805	1-249-429-11	CARBON	10K 5% 1/4W
R509	1-249-443-11	CARBON	0.47 5% 1/4W F	R809	1-247-891-00	CARBON	330K 5% 1/4W
R510	1-249-443-11	CARBON	0.47 5% 1.4W F	R812	1-249-421-11	CARBON	2.2K 5% 1/4W
R520	1-215-457-00	METAL	33K 1% 1/4W	R813	1-215-867-00	METAL OXIDE	470 5% 1W F
R521	1-215-455-00	METAL	27K 1% 1/4W	R814	1-249-411-11	CARBON	330 5% 1/4W
R522	1-247-863-91	CARBON	22K 5% 1/4W	R816	1-215-917-11	METAL OXIDE	1K 5% 3W F
R523	1-247-863-91	CARBON	22K 5% 1/4W	R817	1-216-481-11	METAL OXIDE	1.2K 5% 3W F
R524	1-249-425-11	CARBON	4.7K 5% 1/4W	R818	1-215-882-00	METAL OXIDE	22 5% 2W F
R525	1-249-425-11	CARBON	4.7K 5% 1/4W	R819	1-216-345-11	METAL OXIDE	0.47 5% 1W F
R526	1-249-421-11	CARBON	2.2K 5% 1/4W	R820	1-249-403-11	CARBON	68 5% 1/4W
R527	1-215-437-00	METAL	4.7K 1% 1/4W	R821	1-215-909-11	METAL OXIDE	47 5% 3W F
R600	1-216-490-11	METAL OXIDE	39K 5% 3W F	R822	1-215-868-00	METAL OXIDE	680 5% 1W F
R601	1-249-417-11	CARBON	1K 5% 1/4W	R824	1-249-420-11	CARBON	1.8K 5% 1/4W
R602	1-215-473-00	FILM	150K 15 1/4W	R826	1-247-752-11	CARBON	1K 5% 1/2W
R603	1-215-898-11	METAL OXIDE	10K 5% 2W F	R827	1-249-425-11	CARBON	4.7K 5% 1/4W
R604	1-249-420-11	CARBON	1.8K 5% 1/4W	R828	1-249-430-11	CARBON	12K 5% 1/4W
R605	1-216-362-11	METAL OXIDE	0.27 5% 2W F	R829	1-249-493-11	CARBON	56K 5% 1/2W
R607	1-216-421-11	METAL OXIDE	12 5% 1W F	R830	1-217-778-11	FUSIBLE	1K 5% 1W F
				R833	1-247-887-00	CARBON	220K 5% 1/4W
				R835	1-216-471-11	METAL OXIDE	27 5% 3W F
				R836	1-249-439-11	CARBON	68K 5% 1/4W

D

K

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specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R837	1-249-427-11	CARBON	6.8K 5% 1/4W	< TRANSFORMER >			
R840	1-247-807-31	CARBON	100 5% 1/4W	LF600	△ 1-421-776-21	LFT	
R841	1-249-418-11	CARBON	1.2K 5% 1/4W	LF601	△ 1-421-776-21	LFT	
R842	1-249-441-11	CARBON	100K 5% 1/4W	T601	△ 1-429-604-11	TRANSFORMER, CONVERTER	
R843	1-249-441-11	CARBON	100K 5% 1/4W	T800	1-424-545-11	TRANSFORMER, FERRITE (PMT)	
R846	1-247-885-00	CARBON	180K 5% 1/4W	T803	△ 1-453-169-11	TRANSFORMER ASSY, FLYBACK (UX-1604A2)	
R847	1-247-895-91	CARBON	470K 5% 1/4W	T804	1-437-090-31	HDT	
R849	1-249-429-11	CARBON	10K 5% 1.4W	< THERMISTOR >			
R850	1-249-425-11	CARBON	4.7K 5% 1/4W	THP600	△ 1-809-827-11	THERMISTOR, POSITIVE	
R851	1-215-898-11	METAL OXIDE	10K 5% 2W	*****			
R852	1-249-432-11	CARBON	18K 5% 1/4W	*A-1649-017-A K BOARD, COMPLETE			
R900	1-247-815-91	CARBON	220 5% 1/4W	*****			
R901	1-247-734-11	CARBON	39 5% 1/2W	7-682-548-04	SCREW +P 3X8		
R902	1-247-734-11	CARBON	39 5% 1/2W	< CAPACITOR >			
R904	1-249-389-11	CARBON	4.7 5% 1/4W	C280	1-126-963-11	ELECT	4.7MF 20% 50V
R905	1-247-804-11	CARBON	75 5% 1/4W	C281	1-126-963-11	ELECT	4.7MF 20% 50V
R906	1-247-804-11	CARBON	75 5% 1/4W	C282	1-130-831-21	MYLAR	0.56MF 10% 63V
R907	1-247-804-11	CARBON	75 5% 1/4W	C283	1-126-963-11	ELECT	4.7MF 20% 50V
R908	1-249-401-11	CARBON	47 5% 1/4W	C284	1-124-557-11	ELECT	1000MF 20% 25V
R909	1-249-429-11	CARBON	10K 5% 1/4W	C285	1-124-557-11	ELECT	1000MF 20% 25V
R910	1-249-422-11	CARBON	2.7K 5% 1/4W	C286	1-101-006-00	CERAMIC	0.047MF 50V
R911	1-249-426-11	CARBON	5.6K 5% 1/4W	C287	1-136-165-00	FILM	0.1MF 5% 50V
R912	1-249-429-11	CARBON	10K 5% 1/4W	C288	1-102-074-00	CERAMIC	0.001MF 10% 50V
R913	1-247-863-91	CARBON	22K 5% 1/4W	C289	1-126-962-11	ELECT	3.3MF 20% 50V
R914	1-249-437-11	CARBON	47K 5% 1/4W	R287	1-101-006-00	CERAMIC	0.047MF 50V
R919	1-249-437-11	CARBON	47K 5% 1/4W	< CONNECTOR >			
R921	1-249-437-11	CARBON	47K 5% 1/4W	CN223	*1-568-878-51	PIN, CONNECTOR 3P	
R922	1-247-807-31	CARBON	100 5% 1/4W	CN225	*1-564-511-11	PLUG, CONNECTOR 8P	
R923	1-249-412-11	CARBON	390 5% 1/4W	< IC >			
R924	1-202-731-00	SOLID	10M 10% 1/2W	IC271	8-759-988-94	IC TDA2050	
R925	1-247-807-31	CARBON	100 5% 1/4W	< TRANSISTOR >			
R1200	1-249-425-11	CARBON	4.7K 5% 1/4W	Q203	8-729-900-89	TRANSISTOR DTC144ES	
R1201	1-249-434-11	CARBON	27K 5% 1/4W	Q204	8-729-900-80	TRANSISTOR DTC114ES	
R1202	1-249-389-11	CARBON	4.7 5% 1.4W	Q205	8-729-119-78	TRANSISTOR 2SC2785-HFE	
R1203	1-249-421-11	CARBON	2.2K 5% 1/4W	< RESISTOR >			
R1204	1-249-421-11	CARBON	2.2K 5% 1/4W	R280	1-249-431-11	CARBON	15K 5% 1/4W
R1205	1-249-428-11	CARBON	8.2K 5% 1/4W	R281	1-249-431-11	CARBON	15K 5% 1/4W
R1206	1-249-428-11	CARBON	8.2K 5% 1/4W	R282	1-249-426-11	CARBON	5.6K 5% 1/4W
R1207	1-249-413-11	CARBON	470 5% 1.4W	R283	1-249-435-11	CARBON	33K 5% 1/4W
R1208	1-212-849-00	FUSIBLE	4.7 5% 1/4W	R284	1-249-440-11	CARBON	82K 5% 1/4W
R1209	1-212-849-00	FUSIBLE	4.7 5% 1/4W	R285	1-249-417-11	CARBON	1K 5% 1/4W
R1210	1-249-413-11	CARBON	470 5% 1.4W	R286	1-249-429-11	CARBON	10K 5% 1/4W
R1211	1-249-424-11	CARBON	3.9K 5% 1/4W	R288	1-216-357-00	METAL OXIDE	4.7 5% 1W
R1212	1-249-424-11	CARBON	3.9K 5% 1/4W	R289	1-249-429-11	CARBON	10K 5% 1/4W
R1213	1-249-421-11	CARBON	2.2K 5% 1/4W	R290	1-247-897-11	CARBON	560K 5% 1/4W
R1216	1-249-413-11	CARBON	470 5% 1/4W	R291	1-249-425-11	CARBON	4.7K 5% 1/4W
R1217	1-249-425-11	CARBON	4.7K 5% 1/4W	< SPARK GAP >			
< RELAY >				SG801	1-519-422-11	GAP, SPARK	
RY600	△ 1-755-018-11	RELAY					
< SWITCH >							
S601	△ 1-571-433-21	SWITCH, PUSH (AC POWER)					
S900	1-692-979-11	SWITCH, TACTILE					
S901	1-692-979-11	SWITCH, TACTILE					
S902	1-692-979-11	SWITCH, TACTILE					

J3


VM


REF.NO.	PART NO.	DESCRIPTION	REMARK
	*A-1651-087-A	J3 BOARD, COMPLETE *****	
		< CAPACITOR >	
C291	1-101-005-00	CERAMIC 0.022MF	50V
		< CONNECTOR >	
CN203	*1-564-518-11	PLUG, CONNECTOR 3P	
CN204	1-537-339-11	TERMINAL BOARD	
		< COIL >	
L200	1-402-711-11	INDUCTOR, WIDEBAND	











	*A-1644-070-A	VM BOARD, COMPLETE *****	
	*4-368-683-11	SPRING, TRANSISTOR	
	4-382-854-11	SCREW (M3X10), P, SW(+)	
		< CAPACITOR >	
C1701	1-126-933-11	ELECT 100MF	20% 16V
C1702	1-128-551-11	ELECT 22MF	20% 25V
C1703	1-126-933-11	ELECT 100MF	20% 16V
C1704	1-107-357-11	FILM 0.47MF	5% 100V
C1705	1-107-638-11	ELECT 33MF	20% 160V
C1706	1-104-999-11	FILM 0.1MF	5% 200V
C1707	1-137-397-11	FILM 0.047MF	5% 100V
C1708	1-137-364-11	FILM 0.001MF	5% 50V
C1709	1-137-364-11	FILM 0.001MF	5% 50V
C1710	1-102-074-00	CERAMIC 0.001MF	10% 50V
C1720	1-107-667-11	ELECT 2.2MF	20% 160V
C1721	1-137-397-11	FILM 0.047MF	5% 100V
C1722	1-126-934-11	ELECT 220MF	20% 16V
C1723	1-161-830-00	CERAMIC 0.0047MF	500V
C1725	1-128-551-11	ELECT 22MF	20% 25V
C1726	1-126-934-11	ELECT 220MF	20% 16V
		< CONNECTOR >	
CN1015	*1-568-880-51	PIN, CONNECTOR 5P	
CN1718	1-774-418-11	CONNECTOR, BOARD TO BOARD 8P	
		< DIODE >	
D1701	8-719-991-33	DIODE 1SS133T-77	
D1702	8-719-110-88	DIODE RD39ES-B2	
D1703	8-719-110-88	DIODE RD39ES-B2	
		< COIL >	
L1701	1-408-409-00	INDUCTOR 10UH	
L1702	1-408-403-00	INDUCTOR 3.3UH	
L1703	1-408-409-00	INDUCTOR 10UH	
L1704	1-408-418-00	INDUCTOR 56UH	
L1705	1-408-418-00	INDUCTOR 56UH	
		< TRANSISTOR >	
Q1701	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1702	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1703	8-729-017-05	TRANSISTOR 2SA1837	
Q1704	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1706	8-729-017-06	TRANSISTOR 2SC4793	

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q1708	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1709	8-729-119-78	TRANSISTOR 2SC2785-HFE	
		< RESISTOR >	
R1701	1-249-417-11	CARBON 1K 5%	1/4W
R1702	1-249-417-11	CARBON 1K 5%	1/4W
R1703	1-249-421-11	CARBON 2.2K 5%	1/4W
R1704	1-249-415-11	CARBON 680 5%	1/4W
R1705	1-247-815-91	CARBON 220 5%	1/4W
R1706	1-247-815-91	CARBON 220 5%	1/4W
R1708	1-249-412-11	CARBON 390 5%	1/4W
R1712	1-260-311-11	CARBON 39 5%	1/2W
R1713	1-249-384-11	CARBON 1.8 5%	1/4W F
R1714	1-249-414-11	CARBON 560 5%	1/4W F
R1715	1-249-432-11	CARBON 18K 5%	1/4W
R1716	1-249-417-11	CARBON 1K 5%	1/4W F
R1717	1-216-476-11	METAL OXIDE 180 5%	3W F
R1718	1-249-432-11	CARBON 18K 5%	1/4W
R1719	1-249-384-11	CARBON 1.8 5%	1/4W F
R1720	1-249-400-11	CARBON 39 5%	1/4W F
R1721	1-249-414-11	CARBON 560 5%	1/4W
R1722	1-249-401-11	CARBON 47 5%	1/4W
R1724	1-249-400-11	CARBON 39 5%	1/4W
R1725	1-216-451-11	METAL OXIDE 120 5%	2W F
R1728	1-249-413-11	CARBON 470 5%	1/4W
R1729	1-249-413-11	CARBON 470 5%	1/4W
R1730	1-249-422-11	CARBON 2.7K 5%	1/4W
R1731	1-249-411-11	CARBON 330 5%	1/4W

KV-29C2

Les composants identifiés par une trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The components identified by shading and marked  are critical for safety. Replace only with the part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
MISCELLANEOUS *****							
	 1-406-807-11	COIL, DEGAUSSING					
	1-452-032-00	MAGNET, DISK; 10MM Ø					
	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM Ø					
	 1-453-169-11	TRANSFORMER ASSY, FLYBACK (NX-1604A2)					
	1-504-146-11	SPEAKER (5x11CM)					
	 1-571-433-21	SWITCH, PUSE (AC POWER)					
	1-693-338-11	TUNER/VIF (AEP) (KV-29C2A/29C2D/29C2E/29C2K/29C2R)					
	1-693-340-11	TUNER.VIF (FR) (KV-29C2B)					
	 1-751-680-11	CORD, POWER (WITH NOISE FILTER) 2.5A/250V (KV-29C2A/29C2B/29C2D/29C2E)					
	 1-690-270-21	CORD, POWER (WITH CONNECTOR) 2.5A/250V (KV-29C2K/29C2R)					
	 1-775-045-11	CONNECTOR, DEFLECTION YOKE (DOUBLE)					
V901	 8-451-467-31	DEFLECTION YOKE (Y29GXA2-B2)					
	 8-453-005-11	NECK ASSY, PICTURE TUBE (NA297-M)					
	 8-733-856-05	PICTURE TUBE (SD-269) (M68LCT60X)					
	 8-733-856-51	ITC 29GX2-A1 (NO LEAD)					

ACCESSORIES AND PACKING MATERIALS *****							
	1-544-767-11	SPEAKER (13CM)					
	1-696-554-11	CABLE, SPEAKER (WITH PLUG)					
	4-039-358-01	SCREW (4X16), (+) BV TAPPING					
	*4-203-485-01	CUSHION (LOWER) (ASSY)					
	*4-203-486-01	CUSHION (RIGHT) (ASSY)					
	*4-203-487-01	INDIVIDUAL CARTON					
	*4-395-957-01	BAG, PROTECTION					
	4-203-521-41	MANUAL, INSTRUCTION (KV-29C2A) (ITALIAN)					
	4-203-521-51	MANUAL, INSTRUCTION (KV-29C2B) (FRENCH/GERMAN/ITALIAN/DUTCH)					
	4-203-521-11	MANUAL, INSTRUCTION (KV-29C2D) (DUTCH/GREEK/ENGLISH/GERMAN/TURKISH)					
	4-203-521-71	MANUAL, INSTRUCTION (KV-29C2E) (SPANISH)					
	4-203-521-81	MANUAL, INSTRUCTION (KV-29C2E) (PORTUGUESE/FINNISH/DANISH/NORWEGIAN/ SWEDISH)					
	4-203-521-91	MANUAL, INSTRUCTION (KV-29C2K/29C2R) (CZECH/ENGLISH/POLISH/BULGARIAN/ RUSSIAN)					
	A-1678-054-A	BOX ASSY, WOOFER					
REMOTE COMMANDER *****							
	1-473-692-11	COMMANDER, STANDARD TYPE (RM-862)					
